

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS**

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**CIRIACO PUCILLO,**

**Plaintiff,**

**v.**

**METSO PAPER, INC. AND  
VALMET CONVERTING, INC.**

**Defendants.**

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**Case No. 03-CV-12359 MLW**

**EXHIBITS TO  
MEMORANDUM IN SUPPORT OF DEFENDANT'S  
MOTION IN LIMINE TO EXCLUDE EXPERT TESTIMONY**

# EXHIBIT A



## FORENSIC ENGINEERS & TECHNOLOGISTS

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January 4, 2006

### TECHNICAL REPORT TO

Maureen Counihan, Esquire  
Law Offices of Maureen Counihan, P.C.  
67 South Bedford Street – Suite 400 West  
Burlington, MA 01803

RE: Ciriaco Pucillo

Vs.: Metso Paper, Inc. and Valmet Converting, Inc.

U.S. District Court C.A. No.: 03-CV-12359 ML W

Date of Injury: March 22, 2002

F.E.T. File No.: 2809.1-P

### I. INTRODUCTION

- A. I was retained to conduct an accident investigation relative to injuries sustained by Ciriaco (Jerry) Pucillo on an Atlas slitter rewinder. The slitter rewinder was designed to take a large paper roll and slit the paper into two or more narrower paper rolls. The machine was comprised of the following basic sections: an unwind stand; a series of rolls through which the paper web is threaded; a slitting assembly; and rewind stations.<sup>1</sup> Each rewind station essentially consisted of pivoted rewind arms with chucks, with one or both arms driven by pancake motors. A core is mounted between the rewind arms and secured by the chucks as a prelude to rewinding a slit web. The paper must be properly aligned prior to engaging the rewinding operation at full speed. An assistant initially operates the machine in jog mode to facilitate the set-up. It was during this condition of machine set-up that Mr. Pucillo sustained his injuries. The paper roll core had been mounted on the rewind arm chucks. The core was positioned against the winding drum. Jerry Pucillo was standing in proximity to the core. The

<sup>1</sup> Refer to the illustrations in Appendix A of this report and a machine schematic and threading diagram reproduced from the Atlas operating guide included in Appendix F of this report.

second operator, Bill Dunne, had engaged the machine in the jog mode. Suddenly, and without warning, the winding core accelerated to a high speed in less than five seconds. As a result of the overspeed of the winding core, the core was ejected, striking Jerry Pucillo in the face, causing serious injury. Mr. Pucillo was employed by Proma Technologies, 24 Forge Park, Franklin, MA, at the time of his accident.

- B. I conducted an inspection of the Atlas slitter rewinder on November 19, 2002. At that time, I met with and conferred with Nancy P. Johnson, Steve Bagley, and others employed by Proma Technologies. In addition to inspecting the basic machine, I examined the drive control boards associated with the operation of the rewind motors. I also looked at, and presently have in my possession, the rewind core that struck Mr. Pucillo in the face.
- C. I performed my assignment in this case by utilizing methods used by other professional engineers engaged in the profession of accident investigation and analysis. Prior to stating my opinions, an outline of my experience, training and education in machine design and safety follows.

## **II. BACKGROUND, QUALIFICATIONS AND METHODOLOGY**

- A. Selected illustrations of the machine are provided in Appendix A.
- B. My curriculum vitae is provided as Appendix B.
- C. A list of items, materials and documents I reviewed relating to my investigation and analysis is provided as Appendix C.
- D. My prior four years of trial testimony and deposition testimony is included as Appendix D.
- E. My fee schedule is provided as Appendix E.
- F. Machine schematic and threading diagram is included as Appendix F.
- G. My opinions are based on my background, expertise and experience in the field of management, machine design engineering, and recognized principles of machinery safety relating to specific issues raised by the events in this case.
- H. My expertise includes machine drafting and design of diverse machinery, including web-handling equipment such as winders and slitters, conveyors, machine tools and related controls, safety devices and warnings.
- I. My background and training include:
  - 1. Utilizing general principles of engineering and safety in the design, operation, and maintenance of machinery and equipment, including basic laws of physics and their application to the design of machines.

2. Since performing forensic investigations on a full-time basis, I have continued to analyze machine designs with regard to safety and human factors analysis. I co-authored *Engineering Aspects of Guarding of Machinery and Equipment* for "Products Liability," edited by Frumer and Friedman, published by Lexis Nexis Matthew Bender & Co., Inc. I updated this publication in 1994 for inclusion in release 66 of "Products Liability." I authored a further update of this publication in 2005 for inclusion in release 98 of "Products Liability." I also updated *Power Lawn Mowers* for inclusion in release 101 of "Products Liability," published in December of 2005.
- J. My opinions are based on my experience, training, background, and my inspection and analysis of the Atlas slitter rewinder, its component parts and its operations; a review of items, materials and documents listed in Appendix C; and the analysis of the use of the slitter rewinder under foreseeable operator conditions.

### III. DESCRIPTIVE INFORMATION

- A. Proma Technologies was in the business of manufacturing metallized paper. Manufacturing metallized paper is a multi-stage process that begins with coating the paper with a lacquer. The lacquered paper is dried and moved to the metallizer where aluminum is deposited on the paper in a high vacuum. The metallized paper is then placed in the coating-priming machine where lacquer is placed on top of the aluminum. At the completion of the final coating process, the roll is taken to the slitting machine to be slit into rolls of various widths and diameters.

The Atlas slitter rewinder was purchased in 1992 for the specific purpose of slitting metallized paper. The equipment was designated model CSE1250R, serial number 92036. The slitter rewinder could handle rolls that are ninety-four inches wide and seventy inches in diameter. The machine processed paper at speeds up to 3000 feet per minute (fpm). The machine was designed to accommodate up to five cores on the rewind stations. Each rewind arm chuck was driven by a 4.5 kw pancake motor. In addition, there was one left hand and one right hand non-driven rewind arm. These arms could be paired with a driven arm to rewind narrow width, slit paper.

The rewind arm motors were controlled by a drive board supplied to Proma Technologies by Atlas/Valmet. Each drive consisted of a motherboard and daughterboard. The drive was generic to the extent that the daughterboard was furnished with a switch that could be set in one of two positions depending on the specific application. The switch

consisted of a spring-loaded piece of wire that could be placed under one of two hooks, in position 1 or position 2. Alternatively, the switch could be placed in neither the 1 nor the 2 position, but simply left open.

Ronald Dean Purcell was a senior field service technician with the manufacturer of the slitter rewinder. Mr. Purcell worked with Greg Hagopian, and others from Proma Technologies, post accident, to attempt to determine the cause of the events that led to Jerry Pucillo's injuries. After discounting all other causes, the drive boards were investigated. The following findings were documented: the drive for winding arm 2 left had the switch in neither position; 2 right was in the correct position; 1 left was in neither position; 5 left was in neither position; and the remainder of the drive switches were set properly. It was concluded that an incorrect switch setting on a drive board caused the rewind core to accelerate to high speed, resulting in Mr. Pucillo's accident. Ronald Purcell soldered the switches at Proma Technologies in the proper position.

#### IV. DISCUSSION AND ANALYSIS

- A. It is axiomatic that replacement components for equipment conform to original machinery items and specifications. This is essential to safety and to insure that machinery will function as originally intended. Where a purchased component requires a modification or adjustment by the machine manufacturer, such modification must be specified and identified by a part number assigned by the equipment manufacturer. In a typical machine design engineering/manufacturing environment, all manufactured and purchased components are assigned a part number. A manufactured part must be depicted on an engineering drawing. A purchased component may be illustrated on a drawing showing any specific settings or modifications, or may be identified by description and part number. Again, the description must be specific to insure that the original component and all subsequent replacement parts are essentially identical. It was essential that Atlas/Valmet<sup>2</sup> follow the above procedures when furnishing drive control boards to Proma Technologies. Robert Lyons, former vice president of Atlas/Valmet, testified that Atlas/Valmet did, in fact, assign their own part number to drive boards.<sup>3</sup> However, subsequent testimony by Mr. Lyons, and others, indicated that Atlas/Valmet failed to establish any definitive procedure for insuring that the switches on the drive boards were checked and properly set by Atlas in England or in the Charlotte, NC Atlas/Valmet facility, prior to final shipment to Proma Technologies. Consider the following testimony by Mr. Lyons:<sup>4</sup>

<sup>2</sup> Valmet purchased Atlas' NC facility in the year 2000.

<sup>3</sup> Deposition transcript page 71, lines 1 through 4, inclusive.

<sup>4</sup> Deposition transcript page 60, lines 19 through 25, and page 61, lines 1 through 7, inclusive.

- 19 Q. If Van Leer wanted to purchase a new Infranor drive board for  
20 use in one of their rewind arms, am I correct that one of their  
21 options would be to contact Atlas or Valmet, whatever you  
22 were calling yourself at the time, in North Carolina and  
23 purchase the drive board that way, correct?
- 24 A. Yes.
- 25 Q. And when that order came into Atlas or Valmet, did Van Leer  
1 specify the setting for the switch?
- 2 A. I don't know.
- 3 Q. Do you know what the procedure was in order to purchase that  
4 board?
- 5 A. There would not have been any specific procedure. They  
6 would have ordered the board. We would have sent them the  
7 board.

Mr. Lyons further testified that he doesn't know if the switches on the drive boards were set prior to the drive boards being shipped by Atlas in England. This fact notwithstanding, Mr. Lyons testified that no inspections or checks of switch positions were conducted in the NC facility when the boards were received. The following was extracted from Mr. Lyons' transcript:<sup>5</sup>

- 24 Q. So you don't have any information regarding whether or not  
25 that switch was set on a new board before it left England?
- 1 A. I don't specifically, no.
- 2 Q. And Atlas Valmet doesn't do any inspections of the boards  
3 when they come from England, before they're sent out to  
4 the customer. Is that correct?
- 5 A. I'm not aware of any inspections we do on parts we get from  
6 our parent – you know, from our division in England.
- 7 Q. Well, when a board comes in from England, what happens to  
8 that board in order to then get it to the customer in the states?
- 9 A. Normally it comes in, in a consolidated shipment, so there will  
10 be parts in the shipment for other – so it's just segregated and  
11 repackaged, and sent off to the customer.

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<sup>5</sup> Deposition transcript page 71, lines 24 and 25, inclusive, and page 72, lines 1 through 11, inclusive.

Similar testimony about the absence of any definitive procedure to set the drive board switches was elicited from other knowledgeable Atlas/Valmet employees. The following testimony was given by Atlas/Valmet senior field service technician, Ronald Dean Purcell:<sup>6</sup>

- 20 Q. Am I correct those are switches that are  
21 spring-loaded wires? Is that a simple way to  
22 describe them?  
23 A. Yes.  
24 Q. Who sets those switches?  
25 A. I don't know.  
1 Q. Who would know?  
2 A. Someone in the UK.

Proma Technologies' personnel testified that they never received any instructions about setting switches on the drive boards. They had no knowledge of any obligation on their part to adjust or modify any part they purchased from Atlas/Valmet. Proma Technologies would have had every reasonable expectation that any component they purchased from Atlas/Valmet, including the drive boards, would be compatible with their equipment, without modification. Ronald Dean Purcell testified<sup>7</sup> that Proma Technologies did not change their application from that of the equipment originally supplied. This would negate any necessity for having an alternate switch position on the drive board from that originally supplied with the Atlas slitter rewinder.

In summary, there has been no testimony or documentation to show that Atlas/Valmet specified the switch position setting when purchasing the drive boards. There has been no testimony or documentation to show that Atlas in England set the switches on the drive boards prior to shipping the components to the United States. And there has been no evidence that the Atlas part number assigned to the drives included any specifications for setting the switches. There has been testimony that Atlas/Valmet in NC did not check or set the switches on the drive boards prior to sending the items to Proma Technologies.

A proper and necessary procedure by Atlas/Valmet would have been to inspect and set the switches and fix the switches in position, as, for example, by soldering, prior to

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<sup>6</sup> Deposition transcript page 66, lines 20 through 25, inclusive, and page 67, lines 1 and 2.

<sup>7</sup> Deposition transcript page 74, lines 3 through 9, inclusive.



shipment. Atlas/Valmet could have, and should have, added an instruction – such as a simple decal with the package – to inspect the switch for proper location. This procedure would have averted Jerry Pucillo's injuries.

- B. Robert Lyons testified that Atlas/Valmet provided extensive training to operators and maintenance personnel in conjunction with installing a machine.<sup>8</sup> When queried specifically about setting the switch on the drive boards, the following was transcribed:<sup>9</sup>

- 22 Q. Do you go through the electrical schematics with them?  
23 A. Yes.  
24 Q. And do you go through all the potential switch settings?  
25 A. I don't know.

Ronald Dean Purcell also testified that he was unaware of anyone from Atlas/Valmet providing any training or instructions to Proma employees with respect to setting the switch on the Infranor drive boards.<sup>10</sup>

In addition to providing training during equipment installation, Atlas/Valmet technicians were on site at Proma Technologies for service calls on at least three occasions, and possibly more. The Atlas/Valmet technicians again failed to avail themselves of the opportunity to instruct Proma employees about an item that was crucial to machine operation and operator safety. When asked about this subject, Ronald Dean Purcell responded as follows:<sup>11</sup>

- 25 Q. Prior to March of 2002, with this  
1 accident, do you have any memory of ever telling  
2 anyone at Van Leer or Proma that the switch  
3 needed to be checked before a new board was  
4 installed?  
5 A. No.

Furthermore, there were no instructions in the Atlas Operating Guide about the necessity for properly setting the drive switches. Nor were there warnings about the potential devastating consequences should the switches be improperly set. There were no

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<sup>8</sup> Deposition transcript page 64.

<sup>9</sup> Deposition transcript page 64, lines 22 through 25, inclusive.

<sup>10</sup> Deposition transcript page 113, lines 22 through 25, inclusive.

<sup>11</sup> Deposition transcript page 119, line 25, and page 120, lines 1 through 5, inclusive.

instructions included with the drive boards about proper setting of the switches. Nor were there specific notations on the electrical schematics calling the users attention to the correct switch location shown on the drawings.

The purpose of instructions and warnings is to control or modify the reasonably foreseeable behavior of individuals in order to prevent personal injury. In order to accomplish its intended purpose, a warning must be designed and located to immediately rivet one's attention. This is done in several ways. A warning must be of sufficient size to be conspicuous. Also, a warning crucial to safety, as was necessary in this case, should be placed in more than one location on the machine to ensure that it will be seen and read. The warning must contain an appropriate signal word alerting one of a hazard. The two most effective signal words are Danger and Warning. An additional way of grabbing one's attention is through the use of colors. Red, yellow and orange are common. The warning must be forceful enough to alter a user's behavior. The warning must be intense and communicate a sense of urgency. A warning that lacks intensity will tend to minimize the potential for danger.

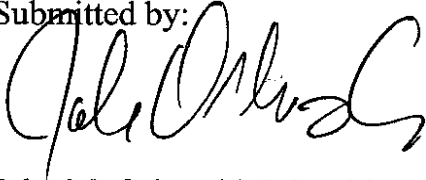
The absence of instructions and warnings on the machine, in the manual, and with the drive boards, contributed to the cause of Jerry Pucillo's injuries. Instructions and warnings must not, however, be used in lieu of, but as an adjunct to, safe quality control procedures. In this case, a safe quality control procedure would have included permanently securing the drive switches in position. Atlas/Valmet had opportunity to inspect and secure the switches prior to shipping the drive boards to Proma Technologies.

## **V. SUMMARY OF FINDINGS**

- A. It is my professional opinion, to a reasonable degree of certainty, subject to supplementation should additional relevant information become available, that:
1. Atlas/Valmet was negligent in failing to inspect the switch on the drive board prior to shipping the board to Proma Technologies;.
  2. Atlas/Valmet was negligent in failing to set and secure the switch on the drive board prior to shipping the board to Proma Technologies;
  3. Atlas/Valmet was negligent in failing to instruct Proma Technologies to check the drive board switch for proper location;

4. the negligence of Atlas/Valmet caused the Atlas model CSE1250R slitter re-winder to operate in an unreasonably dangerous manner; and
5. the negligence of Atlas/Valmet, and the unreasonably dangerous operation of the Atlas model CSE1250R slitter re-winder, as described in this report and outlined above, was a direct and proximate cause of Jerry Pucillo's accident and consequent injuries.

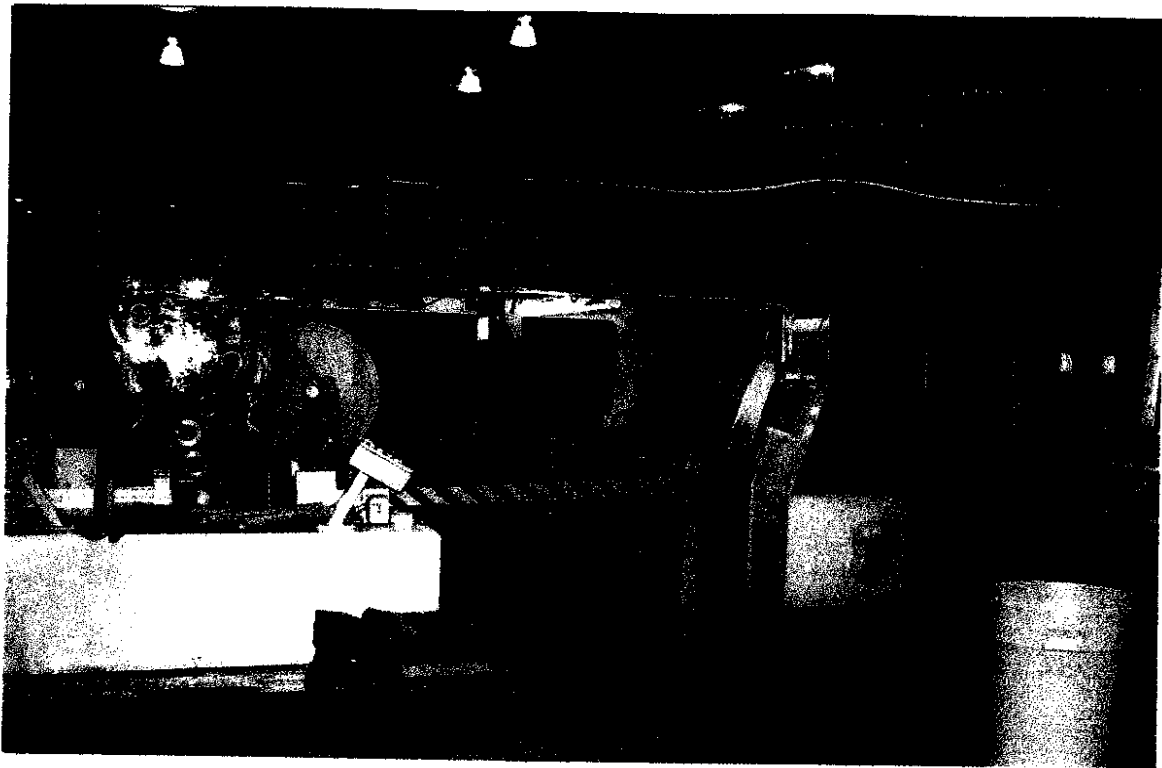
Submitted by:



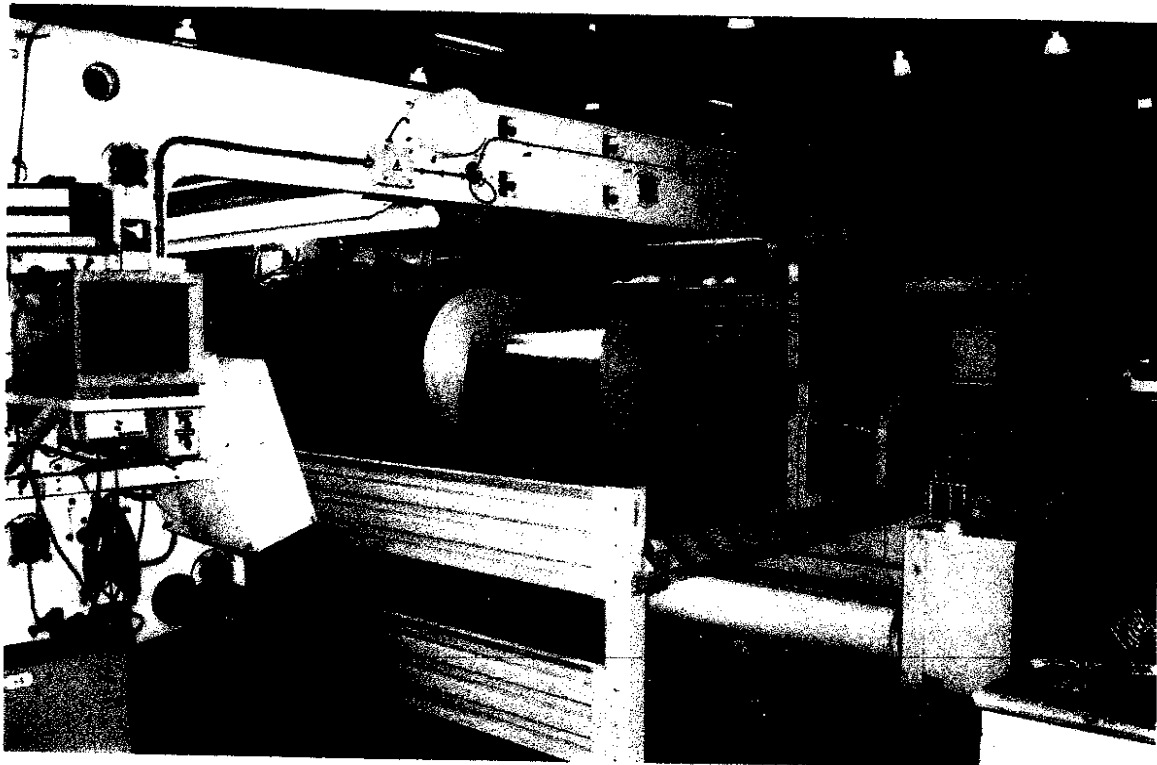
John M. Orlowski, P.E., CSP, BCFE  
Director



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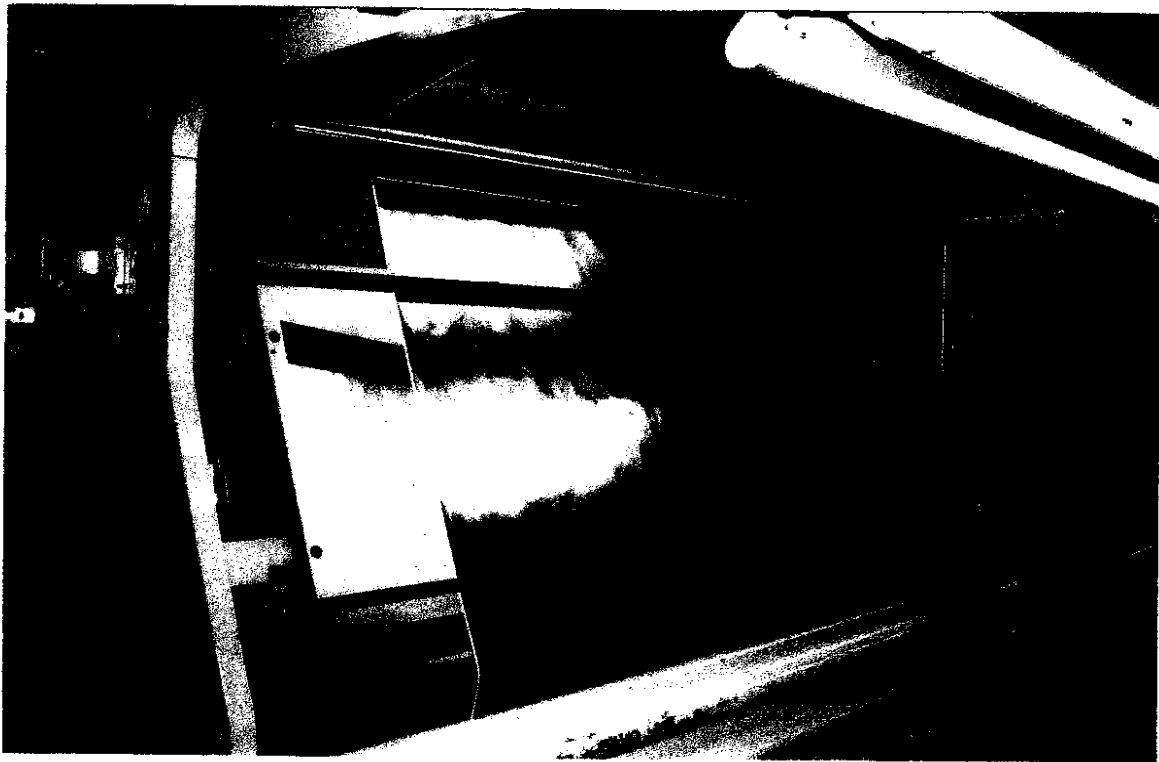


**Fig. 1**

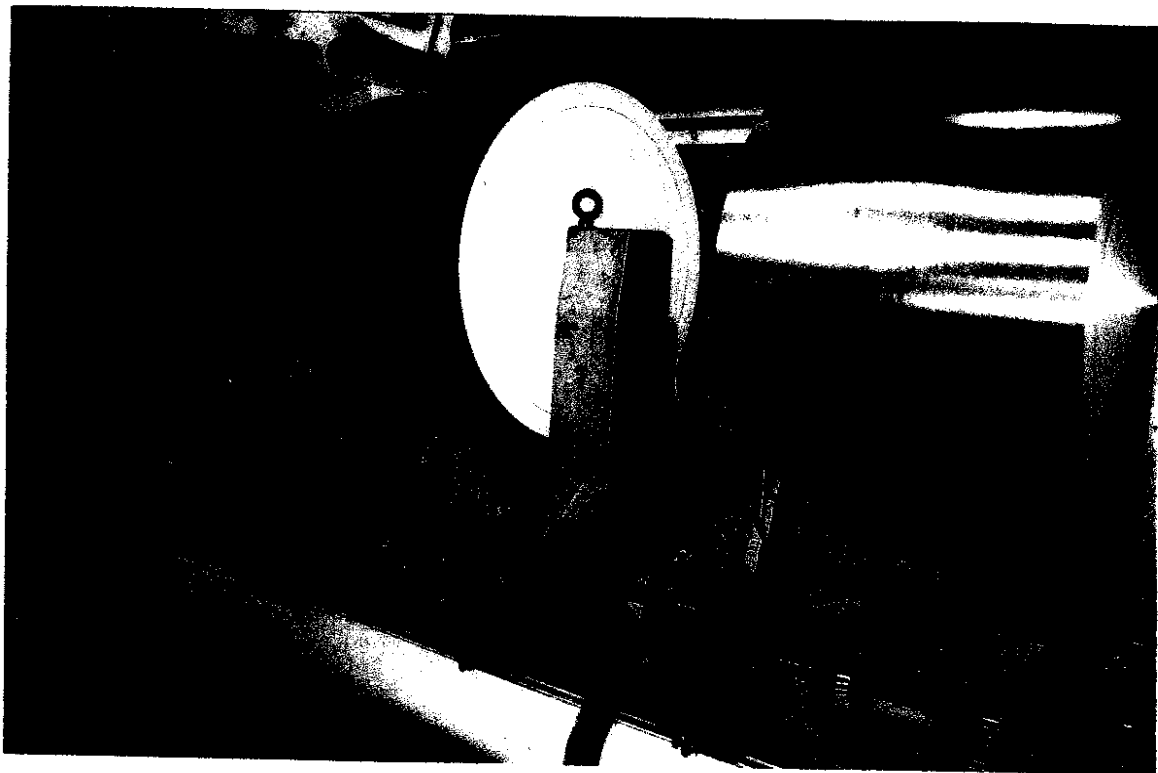


**Fig. 2**

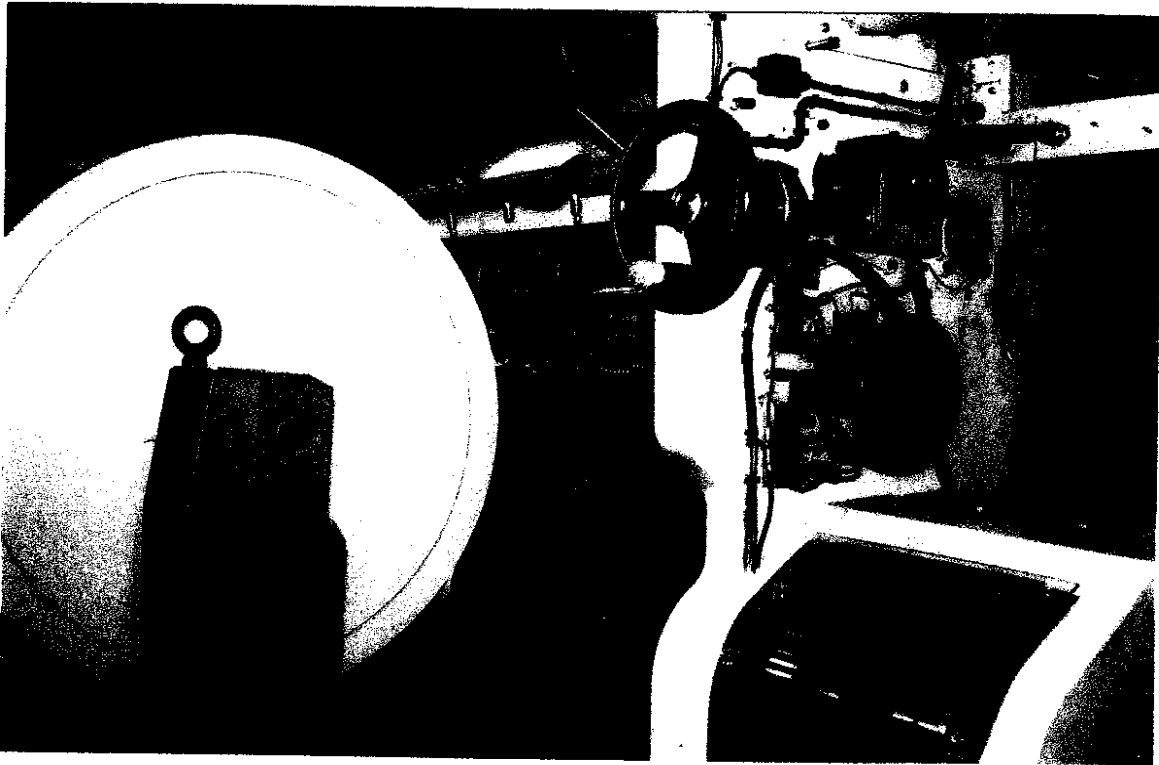
**Fig.'s 1 & 2: Depicts the Atlas model CSE1250R slitter rewinder that caused Jerry Pucillo's injuries.**



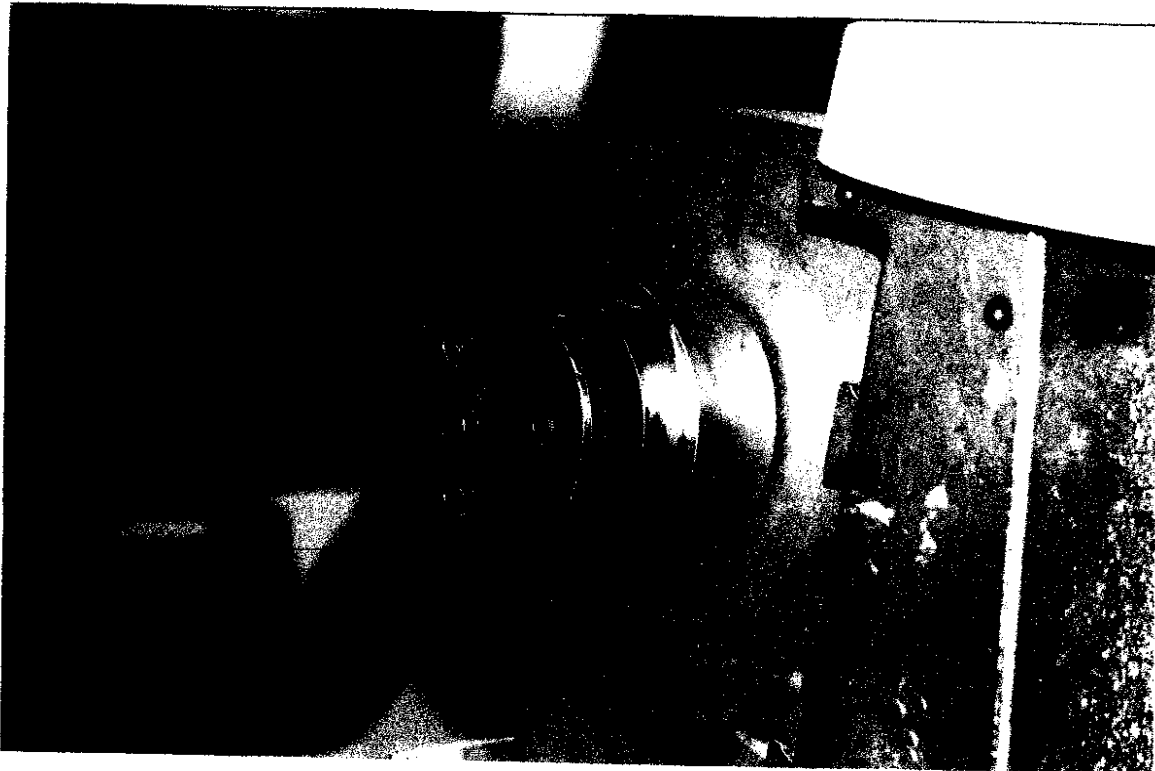
**Fig. 3: View of the metallized paper web.**



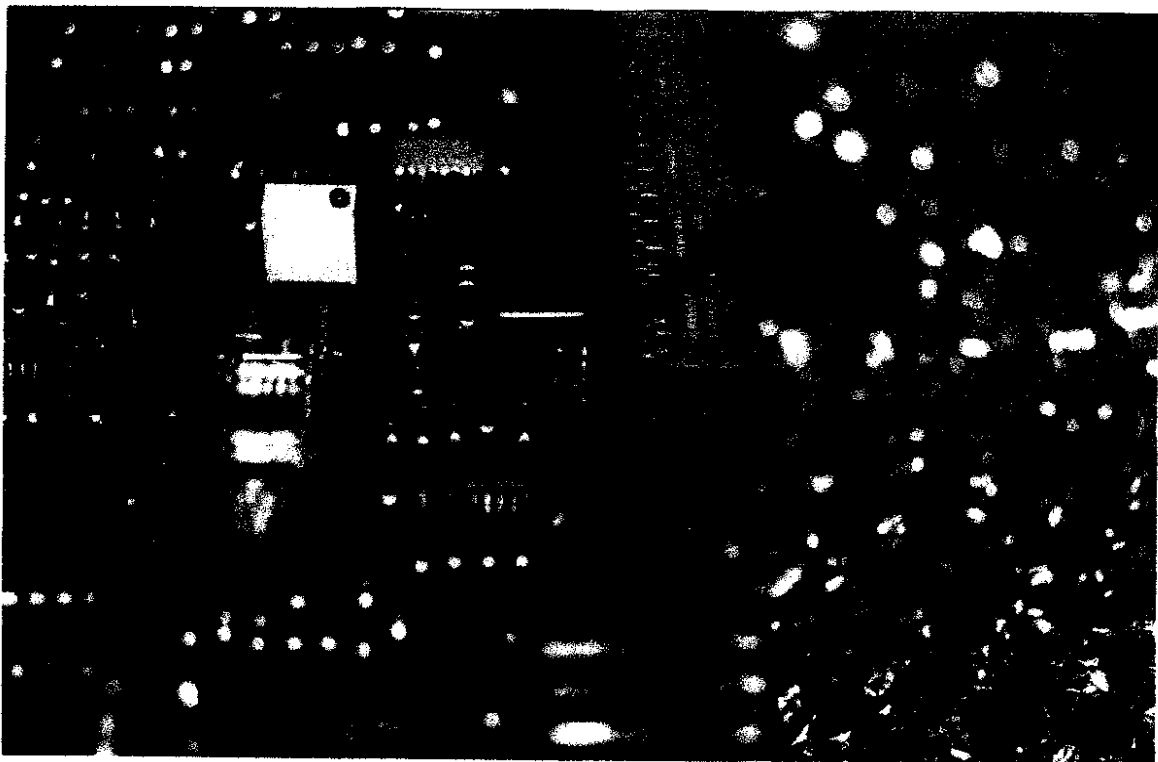
**Fig. 4: Illustration of two rewind stations with partially rewound rolls.**



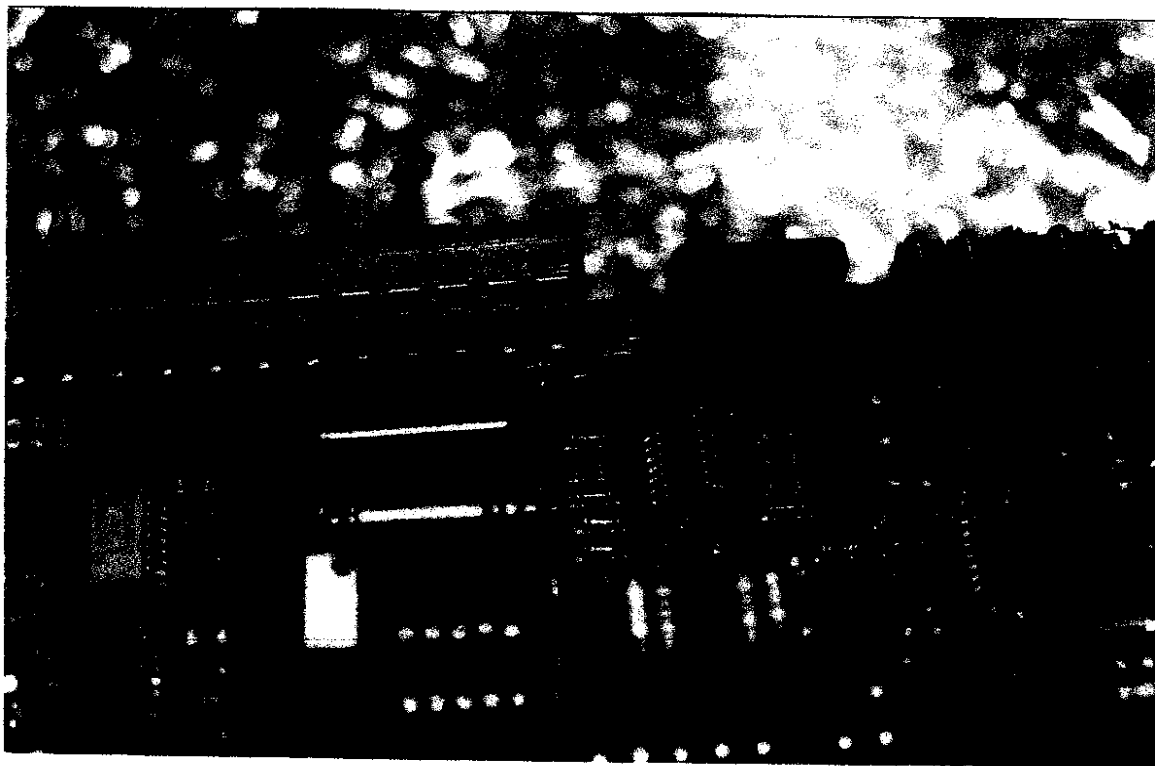
**Fig. 5: View of rewind arm, partially rewound roll, and winding drum.**



**Fig. 6: Depicts a core chuck on a rewind arm.**



**Fig. 7**



**Fig. 8**

**Fig.'s 7 & 8: Depicts a drive board with switch.**

# Appendix B





## **FORENSIC ENGINEERS & TECHNOLOGISTS**

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### **JOHN M. ORLOWSKI, P.E., CSP, BCFE** *Curriculum Vitae*

#### **EXPERIENCE SYNOPSIS**

Background encompasses over 45 years of diversified drafting, design engineering and consulting experience. Has been in responsible charge of significant engineering work in such diverse project areas as chemical processing machinery, material handling equipment, paper roll systems, and predominantly, machine tools. Provides consulting services to attorneys and the insurance industry in products liability cases, fall down incidents, vehicular accident reconstruction, and other personal injury cases, as well as damage assessment to high technology equipment.

#### **FIELDS OF EXPERTISE**

|                                       |                              |
|---------------------------------------|------------------------------|
| Accident Investigation/Reconstruction | Automobile Accidents         |
| Machine Guarding/Safety               | Safety Standards/Regulations |
| Product Safety Evaluation             | Building Codes               |
| Ladders and Scaffolds                 | Premises Liability           |

#### **PROFESSIONAL LICENSES**

Licensed Professional Engineer in Massachusetts, License #29341  
Licensed Professional Engineer in New York State, License #55671  
Licensed Professional Engineer in Maine, License #6208

#### **PROFESSIONAL CERTIFICATION**

Board Certified Safety Professional in Engineering Aspects, Certification #9231  
Board Certified Forensic Examiner, Certification #3784

#### **PROFESSIONAL AFFILIATIONS**

Executive Committee Member of the Automotive, Metals and Power Press Section  
of the National Safety Council  
Diplomate: American College of Forensic Examiners International  
Member of the ASTM International F-13 Committee on Pedestrian/Walkway Safety  
and Footwear  
Member of the American Society of Safety Engineers  
Member of the American Society of Mechanical Engineers  
Member of the Society of Automotive Engineers

## EDUCATION

Bachelor of Science in Mechanical Engineering, LaSalle University, Mandeville, LA. Additional short courses and seminars including, but not limited to, *vehicle dynamics for passenger cars and light trucks*, *air bag sensor design*, *vehicular accident reconstruction*, *fluidic circuitry design* and *machinery safeguarding*.

## PRINCIPAL PUBLICATIONS

Mr. Orlowski has co-authored *Engineering Aspects of Guarding of Machinery and Equipment* for release 39 of "Products Liability," edited by Frumer and Friedman, published by Lexis Nexis Matthew Bender & Co., Inc. This publication was updated by Mr. Orlowski in 1994 for inclusion in release 66 of "Products Liability." This publication was again updated by Mr. Orlowski in 2005, for inclusion in release 98 of "Products Liability." Mr. Orlowski has updated Chapter 100 of Frumer and Friedman's "Products Liability" entitled *Power Lawn Mowers*. *Power Lawn Mowers* was published by Lexis Nexis Matthew Bender & Co., Inc. in 2005. Mr. Orlowski is also a contributing author to "Forensic Accident Investigation: Motor Vehicles," edited by Dr. Thomas L. Bohan and Dr. Arthur Damask, published by the Lexis Nexis Matthew Bender & Co., Inc. in 1995. Mr. Orlowski authored Chapter 5 entitled *The Effects of Payload on Large Truck Rollover*. He also authored the "2001 Cumulative Supplement Volume I" to Chapter 5, which addresses the issue of SUV rollover threshold. Submitted materials for inclusion in "The Comprehensive Forensic Services Manual" by Steven Babitsky, JD, et al, published by SEAK, Inc., in 2000. Contributed to "Cross Examination: The Comprehensive Guide for Experts" by Steven Babitsky, JD, et al, published by SEAK, Inc., in 2003.

## BUSINESS EXPERIENCE

**03/88-present:**

### **DIRECTOR**

Forensic Engineers & Technologists  
Norwood, Massachusetts

Is the owner and director of Forensic Engineers & Technologists. Functions primarily as a forensic consulting engineer. Also assigns, interfaces with, and directs activities of engineers and technical personnel in diverse consulting case investigations. Provides expert witness testimony as needed.

**01/82-06/94**

### **DIRECTOR**

Orlowski & Associates  
Norwood, Massachusetts

Functioned primarily as a forensic consulting engineer. Provided assistance to the legal sector in products liability and damage assessment cases. Also provided design-engineering services to industry on a consulting basis.

**01/79-01/82**

### **MANAGER, APPLICATIONS ENGINEERING**

(Transferred from the Waltham, Massachusetts facility)  
Nichols DeHoff Division, Cranston, Rhode Island  
a W. H. Nichols Co.  
Waltham, Massachusetts

Developed conceptual designs for machinery, fixtures and tooling needed to machine work pieces to specific dimensions and tolerances. Directly interfaced with, and aided the product design group. Worked with the Machinery Remanufacturing Department to assist in determining extent of wear and damages, and provided design assistance necessary to rebuild equipment. Was the designated 30(b)6 expert.

12/77-12/78

**CHIEF ENGINEER**

Nichols Machine Tool Group  
a W. H. Nichols Co.  
Waltham, Massachusetts

Supervised, directed and trained mechanical and electrical design engineering personnel in the design of milling machines and ancillary equipment. Spearheaded the standardization of a milling machine anti-tie down, two-hand machine control in the interests of operator safety. Also added, as standard equipment, a dynamic brake to the milling arbor to prevent excessive cutter rotation on equipment shutdown.

02/77-12/77

**PROJECT ENGINEER**

Lenox Machine Co., Inc.  
Lenox, Massachusetts

Engineered and designed complete systems necessary to the "dry" end processing of paper, such as winders, slitters and paper roll conveyor systems.

12/72-02/77

**PROJECT ENGINEER**

V & O Press Co., Inc.  
Hudson, New York

Performed mechanical and electro-mechanical design necessary to manufacture presses and related equipment to customer specifications, or in conjunction with research and development. Engineered a 500-ton capacity, 30-foot stroke swaging machine for a United States Government arsenal. Also designed and developed an ultra high-speed mechanical punch press, and engineered a 150 ton and 200 ton capacity straight-sided mechanical punch press.

07/72-12/72

**PROJECT ENGINEER**

W. B. McGuire Inc.  
Hudson, New York

Developed a sequential hydraulic valve required for the successful operation of a truck "dock leveler," and engineered, designed and supervised the drafting and the actual construction of a prototype spring-actuated mechanical dock leveler.

02/63-06/72

**CHIEF PRODUCT ENGINEER**

(Initially hired in capacity of design draftsman and promoted through the "ranks" to above position)  
Gifford Wood Co., Inc.  
Hudson, New York

Provided overall engineering service for the chemical processing equipment line, and supervised all engineering activities associated with in-house or field problems. Was charged with conducting laboratory experiments to determine the feasibility of processing a prospective customer's product. Authored technical instruction manuals. Tested and approved final set-up of special machines with interest toward safety of operation, functionality, reliability and agreement with customer specifications. (Began engineering studies in 1964.)

08/60-02/63

#### DETAIL/DESIGN DRAFTSMAN

Worked in various areas of drafting/design. Initial assignments were to generate detailed parts drawings from engineering layouts, with rapidly increasing level of responsibilities, including assembly and layout work. Worked both direct for V & O Press Co., Inc., Hudson, New York, and on contract for Allstates Design Co., Colonie, New York (assigned to Xerox Corp., Rochester, New York), and Northern Industrial Services, Colonie, New York (assigned to both the home office and Beloit Jones - formerly E. D. Jones, Pittsfield, Massachusetts).

#### CONSULTING EXPERIENCE SUMMARY

*Accident Investigations* including, but not limited to: Slip/Trip and Fall Cases, including slip resistance index measurements where necessary, and determination of conformance to Building Codes, Scaffolds, Ladders, Vehicular Accident Reconstruction, Mechanical Punch Presses, Milling Machines, Woodworking Machinery, Printing Machinery, Exercise Machines; Bicycles, Garden Equipment, Wallpaper Steamers, Construction Incidents, Electric Stove Accidents, Dumbwaiters, Pallet Trucks, Fork Lift Trucks.

*Damage Assessment* (damage due to fire, water and/or shipment) including, but not limited to: Textile Machinery, Offset Printing Presses, Food Processing Machinery, Chemical Processing Machinery, Photocopying Machines, Conveying Equipment, EDM Machines, Metrology Instrumentation, Robots, Tablet Making Machinery.

*Failure Analysis* including, but not limited to: Refuse Trucks, Oil Tankers, Heat Exchangers, Structural Shelves, Relief Valves, Construction Vehicles, Elevating Lifts, Air Conditioners, Injection Molding Machinery, Bottled Gas Containers.

*Mechanical Engineering Design* including, but not limited to: Intricate positioning mechanisms utilizing ballscrews and piezoelectric crystals, laser film plotting and scanning equipment, a desiccation chamber, created a quality assurance program in conformance to FDA regulations for a manufacturer of medical products, the "safe load" certification of lifting devices.

#### EXPERT WITNESS TESTIMONY

Has testified as an expert witness in court for both plaintiffs and defendants. Testimony has been in both civil and criminal cases. Has been qualified in diverse subject areas such as: slip index measurements of a floor; table saw accidents; milling machine injuries; structural failures; falls on stairs; slip and falls on snow and ice; machine guarding; punch press accidents; food equipment injuries; and vehicular accident reconstruction.

**PARTIAL LIST OF COURTS IN WHICH TESTIMONY WAS PROVIDED**

- United States District Court, Boston, MA
- United States District Court, Central Islip, NY
- United States District Court, Concord, NH
- United States District Court, New York, NY
- United States District Court, Portland, ME
- United States District Court, Springfield, MA
- Barnstable Superior Court, Barnstable, MA
- Bristol Superior Court, Attleboro, MA
- Bristol Superior Court, Fall River, MA
- Dukes Superior Court, Edgartown, MA
- Essex Superior Court, Lawrence, MA
- Essex Superior Court, Salem, MA
- Hampden Superior Court, Springfield, MA
- Middlesex Superior Court, Cambridge, MA
- Norfolk Superior Court, Dedham, MA
- Plymouth Superior Court, Brockton, MA
- Suffolk Superior Court, Boston, MA
- Worcester Superior Court, Worcester, MA
- Providence Superior Court, Providence, RI
- Washington Superior Court, Kingston, RI
- Norwich Superior Court, New London, CT
- Cheshire Superior Court, Keene, NH
- Hillsboro Superior Court, Nashua, NH
- Merrimack Superior Court, Claremont, NH
- Superior Court of the State of New York, Bronx, NY
- Superior Court of the State of New York, Goshen, NY
- Superior Court of the State of New York, Mt. Kisco, NY
- York Superior Court, Alfred, ME



## **FORENSIC ENGINEERS & TECHNOLOGISTS**

**John M. Orlowski, P.E., CSP, BCFE, Director**  
11 Vanderbilt Avenue, Suite 120  
Norwood, Massachusetts 02062-5056

PHONE: (781)762-8377  
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### **Items Reviewed Relative to the Case Investigation**

1. A report from TM Seger Claim Service, Inc., dated April 11, 2002
2. Thirty-five laser copies of photographs submitted by TM Seger Claim Service, Inc.
3. A five-page report of the post accident investigation, by Harold Isherwood, Greg Hagopian and David Peavey
4. Copy of an e-mail from Harold Isherwood to John Brook
5. Copy of an e-mail from Harold Isherwood to Greg Hagopian, et als.
6. Atlas Model CSE1250R Slitter Rewinder Operating Guide
7. The deposition transcript of Harold Isherwood
8. The deposition transcript of Greg Hagopian
9. The deposition transcript of David G. Peavey
10. The deposition transcript of Frank H. Sereno
11. The deposition transcript of Alan W. Petzold
12. The deposition transcript of Robert Paul Langley
13. The deposition transcript of Ronald Dean Purcell
14. The deposition transcript of Ricky K. Howe
15. The deposition transcript of Robert Lyons
16. Telecopy transmitted from George Rice of Van Leer Metallized Products to Martin Phillips of Atlas Converting, dated June 10, 1996
17. A visit report from Ron Purcell to Bob Lyons, dated April 15, 2002
18. A wiring diagram showing the drive board switch location
19. Memorandum in Support of Plaintiff's Motion to Amend the Complaint

# Appendix D



## FORENSIC ENGINEERS & TECHNOLOGISTS

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Trial and Deposition Testimony  
of  
John M. Orlowski, P.E., CSP, BCFE

**Case Caption:** Pauline Spirito v. Divi Resorts, et. al.  
Jury Trial, December 8, 2005: Essex Superior Court, Lawrence, MA  
Plaintiff Case: Wade M. Welch, Esq., of Welch & Donohoe, LLP, Boston, MA

**Case Caption:** Jean F. Fenelon, et al v. Liberty Mutual Insurance Co.  
Arbitration, December 5, 2005  
Plaintiff Case: Paul B. Shagoury, Esq., of Shagoury & Tominey, Hyde Park, MA

**Case Caption:** Theodore J. Vlachos v. Charles River Park, et als.  
Jury Trial, November 29 and 30, 2005: Middlesex Superior Court, Cambridge, MA.  
Plaintiff Case: Harry J. Vlachos, Esq., of Law Offices of Harry J. Vlachos, Waltham, MA

**Case Caption:** Justin Joyce v. Minuteman Trucks, Inc., et al.  
Deposition, September 16, 2005  
Plaintiff Case: Martin Kantrovitz, Esq., of The Law Offices of Martin Kantrovitz, Boston, MA

**Case Caption:** Commonwealth of Massachusetts v. William Wilson  
Jury Trial, September 15, 2005: Hampden Superior Court, Springfield, MA  
Defense Case: Joseph M. Kenneally, Esq., Three Rivers, MA

**Case Caption:** YCN Transportation, Inc., v. Edward A. Michienzie  
Bench Trial, August 11, 2005: Dedham District Court, Dedham, MA  
Plaintiff Case: Elliot Savitz, Esq., of Law Office of Elliot Savitz, Dedham, MA

**Case Caption:** Josephine Galvin v. Donna Corcoran, et als.  
Jury Trial, July 29, 2005: Norfolk Superior Court, Dedham, MA  
Plaintiff Case: Barbara M. Garrity, Esq., Quincy, MA



**Case Caption:** Robert G. Hooper, Jr., et al. v. Davis-Standard Corporation, et als.

Deposition, July 22, 2005

**Plaintiff Case:** Benjamin R. Zimmerman, Esq., of Sugarman and Sugarman, P.C., Boston, MA

**Case Caption:** Victoria E. Jacob v. Kevin G. Polvani, et al.

Jury Trial, July 7, 2005: New Haven Superior Court, Meriden, CT

**Defense Case:** Jonathan A. Beatty, Esq., of Esty & Buckmir, LLC, New Haven, CT

**Case Caption:** Victoria E. Jacob v. Kevin G. Polvani, et al.

Deposition, June 13, 2005

**Defense Case:** Jonathan A. Beatty, Esq., of Esty & Buckmir, LLC, New Haven, CT

**Case Caption:** Vittorio Spera v. Pfizer, Inc.

Deposition, June 10, 2005

**Plaintiff Case:** Michael R. Denison, Esq., of Stratton Faxon, New Haven, CT

**Case Caption:** Commonwealth of Massachusetts v. Sheryl Clarke

Bench Trial, May 23, 2005: Brockton District Court, Brockton, MA

**Defense Case:** Gregory G. Nazarian, Esq., of Law Offices of Gregory Nazarian, Brockton, MA

**Case Caption:** YCN Transportation, Inc., v. Francis A. Fisher

Bench Trial, May 19, 2005: Dedham District Court, Dedham, MA

**Plaintiff Case:** Elliot Savitz, Esq., of Law Office of Elliot Savitz, Dedham, MA

**Case Caption:** Victoria E. Jacob v. Kevin G. Polvani, et al.

Deposition, May 4, 2005

**Defense Case:** Jonathan A. Beatty, Esq., of Esty & Buckmir, LLC, New Haven, CT

**Case Caption:** Catherine G. Monaco v. Hallmark Health System, Inc.

Jury Trial, February 15, 2005: Woburn District Court, Cambridge, MA

**Defense Case:** Kurt M. Schmidt, Jr., Esq., of Foster & Eldridge, LLP, Cambridge, MA

**Case Caption:** Joel Sekeres, et al. v. Greater Providence YMCA

Jury Trial, January 27, 2005: Providence Superior Court, Providence, RI

**Plaintiff Case:** Jeffrey S. Michaelson, Esq., of Michaelson & Michaelson, North Kingstown, RI

**Case Caption:** Robert R. Crawford, et al. v. Peter W. Downey  
Deposition, January 4, 2005

**Plaintiff Case:** Brett D. Baber, Esq., of Law Office of Brett D. Baber,  
PA, Bangor, ME

**Case Caption:** Christopher Blakey, et al. v. Ogden Projects of Wall-  
ingford, L.P., et al.

Deposition, September 29, 2004

**Defense Case:** William P. Antonoff, Esq., of Gibson & Behman, P.C.,  
Burlington, MA

**Case Caption:** Charles Jordan v. Arthur Lindelof

Jury Trial, September 13, 2004: Norfolk Superior Court, Dedham, MA

**Plaintiff Case:** Mark R. Karsner, Esq., of Karsner & Meehan, P.C.,  
Taunton, MA

**Case Caption:** Mark W. Fortier, et al. v. Giddings & Lewis Machine  
Tools, LLC

Deposition, July 28, 2004

**Plaintiff Case:** Michael R. Palmieri, Esq., of Donovan & O'Connor, LLP,  
North Adams, MA

**Case Caption:** Edward J. Peters v. Crawford Truck Sales, et als.

Deposition, July 21, 2004

**Plaintiff Case:** Andrew W. Pasquina, Esq., of Law Offices of Andrew W.  
Pasquina, Boston, MA

**Case Caption:** Jacqueline Langlais v. Daniel R. Desjardins

Deposition, June 24, 2004

**Plaintiff Case:** Alexei J. Plocharczyk, Esq., of Halloran & Sage, LLP,  
Hartford, CT

**Case Caption:** Cara Campbell v. H.C. Duke & Sons, Inc.

Deposition, June 17, 2004

**Plaintiff Case:** Jennifer L. Booker, Esq., of the Reardon Law Firm,  
P.C., New London, CT

**Case Caption:** Marion Douglas Isenhour v. Summerwood Condominium  
Trust of Mashpee

Jury Trial, June 14, 2004: Barnstable Superior Court, Barnstable, MA

**Plaintiff Case:** David G. Sullivan, Esq., of the Law Office of David G.  
Sullivan, Milton, MA

**Case Caption:** Juan Carlos Mejia, et al., v. Worthington Communities Inc., et als.

Deposition, January 26, 2004

**Plaintiff Case:** John R. Sutton, Esq., of Sutton & Montoto, P.A., South Miami, FL

**Case Caption:** Mark Van Culin, et al. v. Haines Equipment, Inc.

Jury Trial, December 11, 2003: Supreme Court of the State of New York, County of Orange, Goshen, NY

**Defense Case:** Steven M. Sold, Esq., of Pilkington & Leggett, P.C., White Plains, NY

**Case Caption:** Raimondo Terrasi, et al. v. SCM Group S.p.A., et als.

Jury Trial, November 17, 2003: Middlesex Superior Court, Cambridge, MA

**Plaintiff Case:** Timothy G. Lynch, Esq., of Swartz, McKenna & Lynch LLP Boston, MA

**Case Caption:** Kenneth Gagnon, et al. v. Steego Corp., et al.

Deposition, October 20, 2003

**Plaintiff Case:** Francis J. Lynch, III, Esq., of Lynch & Lynch, South Easton, MA

**Case Caption:** Claudia J. Aiken v. Worcester State College

Jury Trial, September 16, 2003: Worcester Superior Court, Worcester, MA

**Plaintiff Case:** Sonja Anastasi, Esq., of Law Offices of Anastasi & Associates, P.C., Oxford, MA

**Case Caption:** Walter Whitbeck, et al. v. Jones Mfg. Co., et al.

Deposition, August 8, 2003

**Plaintiff Case:** Craig T. Dickinson, Esq., of Madsen, Prestley & Parenteau, LLC, New London, CT

**Case Caption:** Paul Richard v. Delta International Machinery Corp., et al.

Deposition, June 26, 2003

**Plaintiff Case:** Andrew W. Pasquina, Esq., Boston, MA

**Case Caption:** Carlos Perez v. Northeast, et al.

Deposition, June 25, 2003

**Plaintiff Case:** John R. Seebold, Esq., of Capasso & Massaroni, LLP, Schnectady, NY

**Case Caption:** James Gillespie, et al. v. Sears, Roebuck and Company, et. al.

Jury Trial, June 9, 2003: U.S. District Court, Boston, MA

**Plaintiff Case:** Michael B. Flynn, Esq., of Flynn & Associates, P.C., Boston, MA

**Case Caption:** Raimondo Terrasi, et al. v. SCM International, S.p.A.,  
et al.

Deposition, June 6, 2003

**Plaintiff Case:** Fredric A. Swartz, Esq., of Swartz, McKenna & Lynch,  
Boston, MA

**Case Caption:** Albert Shay v. Pacific Press & Shear, Inc.

Deposition, May 30, 2003

**Plaintiff Case:** Paul F. Leavis, Esq., of Leavis and Rest, P.C.,  
Boston, MA

**Case Caption:** Luis E. Bonta v. Ward Machinery Company

Deposition, May 28, 2003

**Plaintiff Case:** Mary B. Buonanno, Esq., Takoma Park, MD

**Case Caption:** Nancy Boutcher et al v. Sunoco, Inc., et al

Jury Trial, May 21, 2003: U.S. District Court, Concord, NH

**Plaintiff Case:** Edwinna C. Vanderzanden, Esq. of Getman, Stacey, Tamposi,  
Schulthess & Steere, P.A., Bedford, NH

**Case Caption:** Commonwealth of Massachusetts v. William Powers

Jury Trial, March 18, 2003: Suffolk County Superior Court, Boston, MA

**Defense Case:** John G. Tardif, Esq., Winthrop, MA

**Case Caption:** Rebekha J. Abreu v. Ann & Hope, Inc.

Jury Trial, March, 12, 2003: U.S. District Court, Boston, MA

**Defense Case:** Scott R. Behman, Esq., of Gibson & Behman, P.C.,  
Burlington, MA

**Case Caption:** Barry Funfar et als. v. Falmouth Supply Company

Deposition, March 5, 2003

**Defense Case:** James T. Buchanan, Esq., of Clark, Hunt and Embry,  
Cambridge, MA

**Case Caption:** Nancy Boutcher et al v. Sunoco, Inc., et al

Deposition, February 27, 2003

**Plaintiff Case:** Edwinna C. Vanderzanden, Esq. of Getman, Stacey, Tamposi,  
Schulthess & Steere, P.A., Bedford, NH

**Case Caption:** James Gillespie et al. v. Sears, Roebuck & Company,  
et al.

Deposition, February 14, 2003

**Plaintiff Case:** Lori A. McCarthy, Esq., of Flynn & Associates, P.C.,  
Boston, MA

**Case Caption:** Sung Jin Fasteners, LTD, v. Northstar Equipment Corp.,  
et als.

Bench Trial, February 5, 2003: U.S. District Court, Eastern District,  
Central Islip, NY

Plaintiff Case: Mark Sternick, Esq., of Forest Hills, NY

**Case Caption:** Sandra L. Freilich, et al. v. Home Depot, et al.

Deposition, January 28, 2003

Plaintiff Case: Stacey Forget, Esq., of Shannon & Peters, Worcester, MA

**Case Caption:** Timothy Joyce, et al. v. Intex Recreational Corp.

Jury Trial, January 14, 2003: Hillsborough Superior Court, Southern  
District, Nashua, NH

Plaintiff Case: David Gottesman, Esq., of Gottesman & Hollis, Nashua, NH

**Case Caption:** John Wesley and Betty Wesley v. Ariens Company, et al.

Jury Trial, January 8, 9 and 13, 2003: Supreme Court of the State of  
NY, County of Bronx, Bronx, NY

Plaintiff Case: Douglas Emanuel, Esq., of Bloom & Mintz, New York, NY

**Case Caption:** Estate of Elizabeth Ann Nell v. Trustees of the Sandbar  
Village Condominium Trust

Deposition, November 13, 2002

Plaintiff Case: Daniel M. Kelly, Esq., of Fratar, Kern & Kelly, LLP,  
Springfield, MA

**Case Caption:** Cindi Fagan v. Country Estates Condominium, et al.

Jury Trial, November 8, 2002: Worcester Superior Court, Worcester, MA

Defense Case: James J. Higham, Jr., Esq., of Faille, Higham &  
Daniels, Springfield, MA

**Case Caption:** Joseph Fahy v. Boston Edison Company

Deposition, October 29, 2002

Plaintiff Case: Kevin G. Kenneally, Esq., of Donovan Hatem, LLP,  
Boston, MA

**Case Caption:** John Burnham v. NAACO Materials Handling Group, et al.

Deposition, October 9, 2002

Plaintiff Case: Richard J. Sullivan, Esq., of Sullivan & Sullivan,  
LLP, Wellesley, MA

**Case Caption:** Orpheus McCloud v. Pro-Eco Limited, et als.

Deposition, September 6, 2002

Plaintiff Case: Scott B. Gibson, Esq., of Gibson & Kopsick, Ltd., Wau-  
kegan, IL

**Case Caption:** Sean Patrick Stack v. Milacron, Inc.

Deposition, July 30, 2002

Plaintiff Case: Fredric Bremseth, Esq., of Doshan & Bremseth, Wayzata, MN

**Case Caption:** Deborah S. Collamati, et al. v. 4 Seasons Rental Centers, Inc., et al.

Deposition, July 9, 2002

Plaintiff Case: Robert H. Furbish, Esq., of Smith, Elliott, Smith & Garmey, P.A., Portland, ME

**Case Caption:** Wayne J. Hebert v. Brian W. Augustine, et al.

Arbitration, June 25, 2002

Plaintiff Case: William A. Curry, Esq., of the Law Offices of William A. Curry, P.C., Somerville, MA

**Case Caption:** Bill Williams v. Knudson Mfg., Inc.

Deposition, June 11, 2002

Plaintiff Case: Peter W. Schroeter, Esq., of Smith, Elliott, Smith & Garmey, P.A., Saco, ME

**Case Caption:** Beatriz Rubianogroot, Administratrix of the Estate of Jamie A. Rubianogroot, et als. v. William E. Swanson, et als.

Deposition, May 21, 2002

Plaintiff Case: Daniel R. Brooks, Esq., Brooks Associates, Boston, MA

**Case Caption:** Commonwealth of Massachusetts v. Daryl Pottinger

Jury Trial, March 26, 2002: Bristol Superior Court, Attleboro, MA

Defense Case: James M. Caramanica, Esq., of the Law Offices of John C. Carleen, P.C., Saugus, MA

**Case Caption:** Thomas Kirker, Jr. v. Melroe Company, et als.

Deposition, March 25, 2002

Plaintiff Case: Dina S. Fisher, Esq., of Robinson & Cole, LLP, Hartford, CT

**Case Caption:** Thomas Kirker, Jr. v. Melroe Company, et als.

Jury Trial, March 19 and March 28, 2002: Norwich Superior Court, New London, CT

Plaintiff Case: James A. Wade, Esq., of Robinson & Cole, LLP, Hartford, CT

**Case Caption:** Raymond Mayo, Jr., v. Electri-Cable Assemblies, Inc.

Deposition, March 8, 2002

Defense Case: Anne Kelly Zovas, Esq., of Pomeranz, Drayton, & Stabnick, LLC, Glastonbury, CT

**Case Caption:** Theodore P. Stelmack v. U.S.S. Industrial Park  
Associates, L.L.C., et al.

Deposition, March 1, 2002

**Plaintiff Case:** Frederic N. Halstrom, Esq., of Halstrom Law Offices,  
P.C., Boston, MA

**Case Caption:** Geraldine F. Stanton v. Stop & Shop Supermarket Co.  
Jury Trial, January 29, 2002: Middlesex Superior Court, Cambridge, MA  
**Plaintiff Case:** James R. Burke, Esq., West Newton, MA

**Case Caption:** Thomas Kirker, Jr. v. Melroe Company, et als.

Deposition, January 22 and March 25, 2002

**Plaintiff Case:** Dina S. Fisher, Esq., of Robinson & Cole, LLP,  
Hartford, CT

**Case Caption:** Barbara Greene v. Star Markets Company, Inc. et al.

Deposition, January 10, 2002

**Plaintiff Case:** Francis E. Jenney, Esq., of Harnish, Jenney, Mitchell  
& Resh, Waltham, MA

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## FORENSIC ENGINEERS & TECHNOLOGISTS

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### FEE SCHEDULE

#### FORENSIC CONSULTING (excluding legal testimony):

- Senior Forensic Engineer / Specialist \$190.00 per hour
- Forensic Engineer / Specialist \$170.00 per hour
- Staff Consultant \$150.00 per hour
- Technician \$130.00 per hour
- Consultants with unique qualifications may be invoiced at rates other than those noted above.

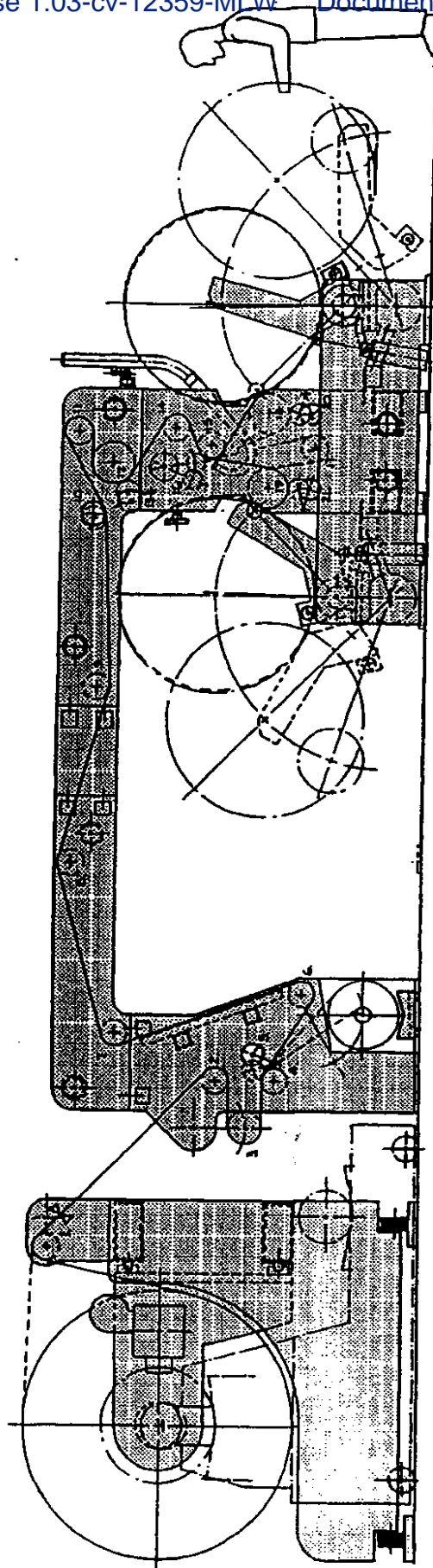
- (1) Travel time is invoiced from office or home to site (or lodging), and return, at the above rates.
- (2) Legal testimony is invoiced at 1.5 times the above rates.
- (3) Legal testimony is invoiced at a four-hour per day minimum.
- (4) Expenses such as photoprocessing, meals, car rental, lodging and airfare, will be invoiced at cost.
- (5) Automobile mileage is invoiced at the current IRS allowance.

#### TERMS:

- (1) F.E.T. requires a \$1,500.00 retainer prior to beginning work on new case assignments. We bill against the retainer. We will invoice additionally depending on the time and cost expended. We will refund the unused retainer on request if we have not been named as an expert witness(s). Subsequent to naming F.E.T. as expert witnesses, no refunds will be granted.
- (2) F.E.T. requires a retainer prior to appearing for court testimony, depositions and other legal testimony. The amount of the retainer will be based on estimated time and expenses. We bill against the retainer. We will invoice additionally depending on the time and cost expended. Please note that should the case settle, or be otherwise concluded prior to trial or deposition, F.E.T. will retain \$1,500.00 and refund the unused balance, if any.
- (3) No deposition will be scheduled until after receipt of retainer. Trial retainers must be received 10 days prior to trial to allow sufficient time for preparation.



Threading diagram



1. CANTING DRIVEN CHROME ROLL
2. DRIVEN CHROME ROLL
3. DRIVEN DANCER ROLL
4. DRIVEN CHROME ROLL
5. SCRAP WINDER NIP ROLL
- 6.-9. DRIVEN CHROME ROLLS
10. DRIVEN BOWED ROLL
11. DRIVEN CHROME ROLL
12. DRIVEN CHROME ROLL
13. PACER NIP ROLL
14. DRIVEN CHROME ROLL
15. FEMALE KNIFE SHAFT
16. MALE KNIFE TRUNNION
17. DRIVEN CHROME ROLL
18. & 19. WINDING DRUM
20. & 21. WINDING DRUM NIP ROLL

ATLAS CONVERTING EQUIPMENT

# EXHIBIT B



## **FORENSIC ENGINEERS & TECHNOLOGISTS**

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### **JOHN M. ORŁOWSKI, P.E., CSP, BCFE** *Curriculum Vitae*

#### **EXPERIENCE SYNOPSIS**

Background encompasses over 45 years of diversified drafting, design engineering and consulting experience. Has been in responsible charge of significant engineering work in such diverse project areas as chemical processing machinery, material handling equipment, paper roll systems, and predominantly, machine tools. Provides consulting services to attorneys and the insurance industry in products liability cases, fall down incidents, vehicular accident reconstruction, and other personal injury cases, as well as damage assessment to high technology equipment.

#### **FIELDS OF EXPERTISE**

Accident Investigation/Reconstruction  
Machine Guarding/Safety  
Product Safety Evaluation  
Ladders and Scaffolds

Automobile Accidents  
Safety Standards/Regulations  
Building Codes  
Premises Liability

#### **PROFESSIONAL LICENSES**

Licensed Professional Engineer in Massachusetts, License #29341  
Licensed Professional Engineer in New York State, License #55671  
Licensed Professional Engineer in Maine, License #6208

#### **PROFESSIONAL CERTIFICATION**

Board Certified Safety Professional in Engineering Aspects, Certification #9231  
Board Certified Forensic Examiner, Certification #3784

#### **PROFESSIONAL AFFILIATIONS**

Executive Committee Member of the Automotive, Metals and Power Press Section  
of the National Safety Council  
Diplomate: American College of Forensic Examiners International  
Member of the ASTM International F-13 Committee on Pedestrian/Walkway Safety  
and Footwear  
Member of the American Society of Safety Engineers  
Member of the American Society of Mechanical Engineers  
Member of the Society of Automotive Engineers

## EDUCATION

Bachelor of Science in Mechanical Engineering, LaSalle University, Mandeville, LA. Additional short courses and seminars including, but not limited to, *vehicle dynamics for passenger cars and light trucks, air bag sensor design, vehicular accident reconstruction, fluidic circuitry design and machinery safeguarding.*

## PRINCIPAL PUBLICATIONS

Mr. Orlowski has co-authored *Engineering Aspects of Guarding of Machinery and Equipment* for release 39 of "Products Liability," edited by Frumer and Friedman, published by Lexis Nexis Matthew Bender & Co., Inc. This publication was updated by Mr. Orlowski in 1994 for inclusion in release 66 of "Products Liability." This publication was again updated by Mr. Orlowski in 2005, for inclusion in release 98 of "Products Liability." Mr. Orlowski has updated Chapter 100 of Frumer and Friedman's "Products Liability" entitled *Power Lawn Mowers*. *Power Lawn Mowers* was published by Lexis Nexis Matthew Bender & Co., Inc. in 2005. Mr. Orlowski is also a contributing author to "Forensic Accident Investigation: Motor Vehicles," edited by Dr. Thomas L. Bohan and Dr. Arthur Damask, published by the Lexis Nexis Matthew Bender & Co., Inc. in 1995. Mr. Orlowski authored Chapter 5 entitled *The Effects of Payload on Large Truck Rollover*. He also authored the "2001 Cumulative Supplement Volume I" to Chapter 5, which addresses the issue of SUV rollover threshold. Submitted materials for inclusion in "The Comprehensive Forensic Services Manual" by Steven Babitsky, JD, et als, published by SEAK, Inc., in 2000. Contributed to "Cross Examination: The Comprehensive Guide for Experts" by Steven Babitsky, JD, et al, published by SEAK, Inc., in 2003.

## BUSINESS EXPERIENCE

03/88-present:

### DIRECTOR

Forensic Engineers & Technologists  
Norwood, Massachusetts

Is the owner and director of Forensic Engineers & Technologists. Functions primarily as a forensic consulting engineer. Also assigns, interfaces with, and directs activities of engineers and technical personnel in diverse consulting case investigations. Provides expert witness testimony as needed.

01/82-06/94

### DIRECTOR

Orlowski & Associates  
Norwood, Massachusetts

Functioned primarily as a forensic consulting engineer. Provided assistance to the legal sector in products liability and damage assessment cases. Also provided design-engineering services to industry on a consulting basis.

01/79-01/82

### MANAGER, APPLICATIONS ENGINEERING

(Transferred from the Waltham, Massachusetts facility)  
Nichols DeHoff Division, Cranston, Rhode Island  
a W. H. Nichols Co.  
Waltham, Massachusetts

Developed conceptual designs for machinery, fixtures and tooling needed to machine work pieces to specific dimensions and tolerances. Directly interfaced with, and aided the product design group. Worked with the Machinery Remanufacturing Department to assist in determining extent of wear and damages, and provided design assistance necessary to rebuild equipment. Was the designated 30(b)6 expert.

**12/77-12/78**

**CHIEF ENGINEER**

Nichols Machine Tool Group  
a W. H. Nichols Co.  
Waltham, Massachusetts

Supervised, directed and trained mechanical and electrical design engineering personnel in the design of milling machines and ancillary equipment. Spearheaded the standardization of a milling machine anti-tie down, two-hand machine control in the interests of operator safety. Also added, as standard equipment, a dynamic brake to the milling arbor to prevent excessive cutter rotation on equipment shutdown.

**02/77-12/77**

**PROJECT ENGINEER**

Lenox Machine Co., Inc.  
Lenox, Massachusetts

Engineered and designed complete systems necessary to the "dry" end processing of paper, such as winders, slitters and paper roll conveyor systems.

**12/72-02/77**

**PROJECT ENGINEER**

V & O Press Co., Inc.  
Hudson, New York

Performed mechanical and electro-mechanical design necessary to manufacture presses and related equipment to customer specifications, or in conjunction with research and development. Engineered a 500-ton capacity, 30-foot stroke swaging machine for a United States Government arsenal. Also designed and developed an ultra high-speed mechanical punch press, and engineered a 150 ton and 200 ton capacity straight-sided mechanical punch press.

**07/72-12/72**

**PROJECT ENGINEER**

W. B. McGuire Inc.  
Hudson, New York

Developed a sequential hydraulic valve required for the successful operation of a truck "dock leveler," and engineered, designed and supervised the drafting and the actual construction of a prototype spring-actuated mechanical dock leveler.

**02/63-06/72**

**CHIEF PRODUCT ENGINEER**

(Initially hired in capacity of design draftsman and promoted through the "ranks" to above position)  
Gifford Wood Co., Inc.  
Hudson, New York

Provided overall engineering service for the chemical processing equipment line, and supervised all engineering activities associated with in-house or field problems. Was charged with conducting laboratory experiments to determine the feasibility of processing a prospective customer's product. Authored technical instruction manuals. Tested and approved final set-up of special machines with interest toward safety of operation, functionality, reliability and agreement with customer specifications. (Began engineering studies in 1964.)

08/60-02/63

#### DETAIL/DESIGN DRAFTSMAN

Worked in various areas of drafting/design. Initial assignments were to generate detailed parts drawings from engineering layouts, with rapidly increasing level of responsibilities, including assembly and layout work. Worked both direct for V & O Press Co., Inc., Hudson, New York, and on contract for Allstates Design Co., Colonie, New York (assigned to Xerox Corp., Rochester, New York), and Northern Industrial Services, Colonie, New York (assigned to both the home office and Beloit Jones - formerly E. D. Jones, Pittsfield, Massachusetts).

#### CONSULTING EXPERIENCE SUMMARY

*Accident Investigations* including, but not limited to: Slip/Trip and Fall Cases, including slip resistance index measurements where necessary, and determination of conformance to Building Codes, Scaffolds, Ladders, Vehicular Accident Reconstruction, Mechanical Punch Presses, Milling Machines, Woodworking Machinery, Printing Machinery, Exercise Machines; Bicycles, Garden Equipment, Wallpaper Steamers, Construction Incidents, Electric Stove Accidents, Dumbwaiters, Pallet Trucks, Fork Lift Trucks.

*Damage Assessment* (damage due to fire, water and/or shipment) including, but not limited to: Textile Machinery, Offset Printing Presses, Food Processing Machinery, Chemical Processing Machinery, Photocopying Machines, Conveying Equipment, EDM Machines, Metrology Instrumentation, Robots, Tablet Making Machinery.

*Failure Analysis* including, but not limited to: Refuse Trucks, Oil Tankers, Heat Exchangers, Structural Shelves, Relief Valves, Construction Vehicles, Elevating Lifts, Air Conditioners, Injection Molding Machinery, Bottled Gas Containers.

*Mechanical Engineering Design* including, but not limited to: Intricate positioning mechanisms utilizing ballscrews and piezoelectric crystals, laser film plotting and scanning equipment, a desiccation chamber, created a quality assurance program in conformance to FDA regulations for a manufacturer of medical products, the "safe load" certification of lifting devices.

#### EXPERT WITNESS TESTIMONY

Has testified as an expert witness in court for both plaintiffs and defendants. Testimony has been in both civil and criminal cases. Has been qualified in diverse subject areas such as: slip index measurements of a floor; table saw accidents; milling machine injuries; structural failures; falls on stairs; slip and falls on snow and ice; machine guarding; punch press accidents; food equipment injuries; and vehicular accident reconstruction.

# EXHIBIT C



Volume I  
Pages 1 to 121  
Exhibits (1)

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

CIRIACO PUCILLO,  
Plaintiff(s),

v.

Civil Action  
No. 03-CV-12359MLW

METSO PAPER, INC. AND  
VALMET CONVERTING, INC.,  
Defendant(s).

DEPOSITION OF JOHN M. ORLOWSKI, a witness called  
by counsel for the Defendant Valmet Paper Converting,  
Inc., taken pursuant to the applicable rules, before  
Diane L. McElwee, Registered Merit Reporter and  
Notary Public in and for the Commonwealth of  
Massachusetts, at the Law Offices of Mark Petersen,  
490 Shrewsbury Street, Worcester, Massachusetts, on  
Friday, January 27, 2006, commencing at 9:50 AM.

JAMES GIBBONS AND ASSOCIATES  
617-438-0402



1 A That is correct.

2 Q Let's just take a few minutes and work our  
3 way through that C.V.

4 A Certainly.

5 Q Professional licenses, it says you are a  
6 Licensed Professional Engineer in Massachusetts; is  
7 that correct?

8 A Correct.

9 Q When was that license obtained?

10 A To the best of my recollection that license  
11 was obtained in October of 1978.

12 Q And the New York license was obtained when?

13 A In April of 1978.

14 Q How about the license in Maine?

15 A That was attained in January of 1989.

16 Q As a licensed professional engineer in any  
17 of those three jurisdictions, are you licensed in a  
18 particular subject matter area? Are you licensed  
19 generally as an engineer?

20 A In New York State I am licensed as an  
21 engineer, as a professional engineer. In  
22 Massachusetts I am licensed as a mechanical  
23 professional engineer.

24 Q In order to obtain your mechanical

1 engineering license in Massachusetts, did you take a  
2 test specifically on the subject of mechanical  
3 engineering?

4 A I took a test in New York State on the  
5 subject of engineering. There were questions that we  
6 could select from various disciplines, and the  
7 questions I selected were pretty much in the area of  
8 mechanical engineering. It's a two-day examination.

9 Q Did you take an examination for the license  
10 in Massachusetts and the license in Maine?

11 A I did not. I obtained that license through  
12 a reciprocity agreement with New York. I did,  
13 however, have to go through the entire application  
14 process.

15 Q So your license in New York is by  
16 examination?

17 A Correct.

18 Q Your license in Massachusetts and in Maine  
19 is by reciprocity?

20 A That is correct.

21 Q Does Massachusetts provide for a general  
22 engineering license, or are all their licenses by  
23 subject matter?

24 A I believe all their licenses are by subject

1 matter.

2 Q Just explain to me, if you would, if  
3 New York grants a general engineering license, how  
4 does Massachusetts know what subject matter license  
5 to give you?

6 A Based on the application that I submit. I  
7 submitted an application to obtain my license as a  
8 professional mechanical engineer.

9 Q And did you have to show certain  
10 qualifications in the mechanical engineering field in  
11 order to get that license, or was it purely  
12 reciprocity?

13 A As I said, I had to go through the entire  
14 process, including my background, including the  
15 requisite references, as I recall, five references or  
16 six references, three or four of which had to be  
17 Registered Professional Engineers; and they contacted  
18 New York State, to the best of my knowledge, and  
19 obtained a copy of the examination.

20 Q What I am trying to think through my head is  
21 could you have checked the box to be a structural or  
22 chemical engineer in Massachusetts and received that  
23 license?

24 A I don't think I would have received that

1 license because they contact the State of New York to  
2 obtain a copy of my examination, and it would be  
3 apparent by looking at a copy of my examination that  
4 I did not answer questions related to chemical  
5 engineering, for example.

6 Q As a licensed mechanical engineer, what is  
7 it that that entitles you to do as opposed to a  
8 structural engineer or chemical engineer or any other  
9 engineer?

10 A Well, there is obviously a lot of overlap  
11 between the various disciplines of engineering. A  
12 mechanical engineer basically utilizes mathematics  
13 and the physical sciences to design machinery and  
14 equipment. However, designing a machine requires a  
15 certain amount of structural knowledge because  
16 machine components are in fact structures. It  
17 requires a certain amount of electrical engineering  
18 knowledge because machines are operated typically by  
19 electrical motors or other types of motors.

20 So there is a lot of overlap, but in  
21 essence a mechanical engineer will design machinery  
22 and equipment.

23 Q Your C.V. shows you have two professional  
24 certifications; is that correct?

1 Q Tell me what that job entailed.

2 A That entailed the supervision and direction  
3 of electrical engineers, designers, draftsmen in  
4 designing milling machines, modifying milling  
5 machines, designing tooling, work-holding fixtures  
6 for a specific customer's requirements.

7 Again Nichols had standard milling  
8 machine product lines, and most of what we did were  
9 modifications to those product lines or the design of  
10 a work-holding fixture for a specific purpose. There  
11 was an electrical engineer under my supervision that  
12 designed the electrical circuitry for the machines,  
13 depending on the cycle that was required to  
14 manufacture a specific product.

15 Q You stayed at Nichols Machine Tool Group for  
16 about a year?

17 A Well, Nichols Machine Tool Group was part of  
18 the W.H. Nichols Company, and what had happened is  
19 they made a decision to transfer the milling machine  
20 product line to their Rhode Island facility. When  
21 they transferred the milling machine product line,  
22 they transferred me with the product line, and I  
23 became the manager of the application and engineering  
24 department, which was basically the conceptual

1 engineering phase of it as opposed to the actual  
2 engineering phase of it.

3 Q Still with the milling machines?

4 A Still with the milling machines, but I was  
5 also in charge of a couple of engineers that did the  
6 application engineering on boring machines, deep hole  
7 milling machines and any specialized machines we  
8 might have gotten involved in.

9 Q So you really spent four years with the same  
10 company?

11 A Yes, that is correct.

12 Q Then in 1982 you went off on your own?

13 A That's correct.

14 Q And you founded, is that correct, Orlowski &  
15 Associates?

16 A That is correct.

17 Q In 1988 were you a founder of Forensic  
18 Engineers & Technologists?

19 A It gets a little convoluted. Me and another  
20 individual purchased a company called Staller  
21 Associates, S T A L L E R, and Staller Associates was  
22 involved with consulting for insurance companies  
23 regarding damage assessment, high-tech equipment,  
24 such as computers. When we purchased Staller

1 A Or FET, yes.

2 Q Am I correct as I read this C.V. that since  
3 1994 your work in essence has been related to claims  
4 or lawsuits, investigating claims and lawsuits for  
5 trial?

6 A Pretty much, not a hundred percent. We do  
7 occasionally consult with industry, but the principal  
8 portion of the business is related to lawsuits, yes,  
9 or cases that have the potential to go to suit.

10 Q When you say "the principal portion," would  
11 you say over 90 percent?

12 A Yes, well over 90 percent.

13 Q Well over 90 percent?

14 A Yes.

15 Q Well over 90 percent for the last 15 years?

16 A I would say that's a fair statement, yes.

17 Q Are you familiar with a company known as  
18 Infranor, I N F R A N O R?

19 A I am since I became involved in this case,  
20 yes.

21 Q You were not before you became involved in  
22 this case?

23 A I was not, no.

24 Q Before you became involved in this case you



1 estimate that drive boards became part of the  
2 machinery that you were building and selling, if  
3 ever?

4 A It's going to be difficult for me to be very  
5 specific. We are going back a few years.

6 Q Let me ask it another way.

7 The drive boards that are focused on in  
8 this case, is that a technological development that  
9 occurred at some point in time?

10 A At some point in time.

11 Q Is it a technological development that  
12 occurred later than 1970?

13 A Probably later than 1970, but I am not a  
14 hundred percent sure of that.

15 Q I guess I am trying to see whether or not  
16 electric drive boards -- is that what we decided  
17 to -- no, drive boards -- whether drive boards were  
18 used in the machines that you made for Gifford Wood,  
19 for example.

20 A The machines that I made for Gifford Wood I  
21 don't recall. There may have been drive boards in  
22 those machines. I know there were some machines that  
23 we became involved in that had variable RPMs, but I  
24 don't recall specifically when those came into



1 effect.

2 Q Do you recall whether there were drive  
3 boards in the dock levelers at W.B. McGuire?

4 A I am quite sure there were no drive boards  
5 in the dock levelers.

6 Q At V & O press, the presses you made, did  
7 they have drive boards?

8 A I don't recall. Most of the presses were  
9 constant speed, but there may have been variable  
10 speed drives on those presses that would have  
11 contained drive boards.

12 Q But if there was, you were not involved in  
13 that aspect of the machine?

14 A I would have been involved in some aspect of  
15 the drives. I would have been involved in  
16 determining horsepower requirements, for example,  
17 speed requirements, and I may have been involved in  
18 some degree to specifying the specific drive which  
19 included the drive boards on a press or on a type of  
20 machinery.

21 Q When you say you may have been included in  
22 specifying the particular drive, are you saying like  
23 the name of the company, like an Infranor drive?

24 A The name of the company, the specific model

1 number, other specifications, such as speed, torque,  
2 whatever other requirements might be necessary, yes.

3 Q Did any of the companies that you worked  
4 for -- I was going to say prior to Orlowski &  
5 Associates, but I can ask it at any point in time.  
6 Have any of the companies that you have worked for at  
7 any point in your career designed drive boards?

8 A No.

9 Q Have any of the companies that you have  
10 worked for in your career manufactured drive boards?

11 A Not to my recollection, no.

12 Q If the machinery that you designed for any  
13 of the companies you worked for needed a variable  
14 drive and a drive board was going to be used in the  
15 machine, would you have purchased that drive board  
16 from another vendor?

17 A Yes.

18 Q Are there particularly well-known companies  
19 that sell and manufacture drive boards?

20 A Typically one would buy -- and there may be  
21 exceptions to this. Typically one would buy a drive  
22 as a system, a motor, and electronic components. If  
23 I was a design engineer designing a hypothetical  
24 piece of machinery, I wouldn't buy a motor or drive

1 A Okay.

2 Q You told me before prior to this case you  
3 were not familiar with the name Infranor.

4 A That is correct.

5 Q Having been involved in this case now, did  
6 you do some research or analysis to determine how  
7 long Infranor has been in business?

8 A No, I have not.

9 Q Have you tried to find out whether they are  
10 well-known in the area for providing drive boards?

11 A No.

12 Q Do you have any information on their  
13 reputation?

14 A I don't.

15 Q Do you know how popular or unpopular their  
16 drive boards are?

17 A No, I don't.

18 Q Do you know who their competitors are?

19 A Not directly other than the two names that I  
20 just mentioned.

21 Q This machine was made and delivered in 1993,  
22 correct?

23 A I understand, yes.

24 Q Since 1993 has either Eaton or U.S. Motors

1 made drive boards?

2 A I don't know.

3 Q Other than Infranor, do you know the name of  
4 any company anywhere in the world that made drive  
5 boards for machinery since 1993?

6 A I don't.

7 Q When I look at a drive board, there is a  
8 bunch of circuits. That's what it looks like to me.

9 A Components, yes.

10 Q But a bunch of components. In this room is  
11 a bunch of components, tables, chairs, and lamps.  
12 It's just a piece of wires and metal put on a board,  
13 and the board is attached to something bigger and  
14 heavier.

15 A Okay.

16 Q How many different types of drive boards are  
17 there?

18 A There has to be a multitude of different  
19 types of drive boards, depending on the system.

20 Q Okay. So if we look at the drive board in  
21 this case, is it distinguishable from any other drive  
22 board anywhere in the world?

23 A A drive board would be identified by a  
24 specific model number, serial number, or some type of

1 identification. Any other drive board, either by the  
2 same manufacturer or by another manufacturer, would  
3 have its own designation. Even if it looked the  
4 same, it wouldn't necessarily be the same if it  
5 didn't have the identical designation.

6 Q Let me ask you to take a look at Exhibit  
7 No. 1. There are some photographs in there. Maybe  
8 this is the way to do it. I believe Exhibit 7  
9 maybe --

10 A Appendix A.

11 Q -- Appendix A, Figure 7 and Figure 8 --

12 A Yes.

13 Q -- contains two photographs of a circuit  
14 board, correct?

15 A They do.

16 Q Did you take these pictures?

17 A I did.

18 Q Did you put the arrow on the pictures?

19 A I did.

20 Q What does Figure 7 show?

21 A It shows a drive board with a switch.

22 Q What does Figure 8 show?

23 A Same thing, the same board.

24 Q Same board. With the same switch?

1 pointing to a switch that is a speed limiting device?

2 A I don't know what that switch does. That's  
3 the board I was shown during my initial inspection,  
4 and it was represented to me that that was the switch  
5 involved in the incident. I now know that is not the  
6 switch that was involved in the incident.

7 Q You know it's not the switch involved in the  
8 incident because you know that's not the drive board  
9 that was in the machine; is that right?

10 A Well, that's partly right, yes.

11 Q Do you also know that's not the switch that  
12 controls the speed limiting device?

13 A It's my understanding it probably does not.  
14 I don't know what that switch does.

15 Q Your understanding that it probably does not  
16 comes from where?

17 A Comes from the review of the documents.

18 There is another switch involved in the  
19 incident that was on a daughter board. That's not

20 the switch on the daughter board.

21 Q Where is that switch found?

22 A That's on the basic mother board.

23 Q When did you put this report together?

24 A January 4th.

1 Q What is the basis for your opinion that the  
2 switch needs to be secured in place? Let's just get  
3 on the record what's clear. You can set the switch  
4 by pushing the wire under the hook, correct?

5 A Correct.

6 Q That's set. It's in the right position,  
7 right?

8 A It's either in the right position or the  
9 wrong position, yes.

10 Q But it's set?

11 A It's set in a position.

12 Q Your testimony is it needs to be set and  
13 secured, correct?

14 A Sure.

15 Q By "secured" you mean soldered?

16 A That's one way of doing it.

17 Q What other ways are there?

18 A To have a design so it can't come out, put a  
19 latch over it by design. Soldering is pretty basic.

20 There is always the possibility that during shipment  
21 a switch could come loose if it's not secured.

22 Q So there is the possibility the switch could  
23 come loose if it's merely latched, correct?

24 A Possibly, yes.

1 if there is any possibility of it coming loose,  
2 coming unlatched, it should be secured, yes.

3 Q So I said that would no longer be a switch,  
4 and you said, right, that would be a circuit?

5 A Right.

6 Q So now we have changed the switch to a  
7 circuit. I am asking you the basis for your opinion  
8 that it's improper to use a switch.

9 A If the supplier cannot ensure that the  
10 switch remains in its proper position, then it  
11 shouldn't be a switch. The only reason it's a switch  
12 is to save money.

13 Q I understand your testimony. Now I want to  
14 know the basis for it.

15 A The basis for it?

16 Q Yes.

17 A My years of experience in designing  
18 machinery and components.

19 Q Are there standards in the electrical  
20 industry, electronics industry that prohibit the use  
21 of a switch?

22 A I don't think you would find a standard that  
23 would be that specific, no.

24 Q Are there standards that say when a switch



1 A Yes.

2 Q You told me that Atlas U.S. sold replacement  
3 parts for it.

4 A Correct.

5 Q So who is the machine manufacturer?

6 A Well, Atlas U.K. is the machine  
7 manufacturer, but Atlas/Valmet supplied the boards.

8 Q So Atlas/Valmet or Atlas U.S. is not the  
9 machine manufacturer?

10 A Not the machine manufacturer, but they are  
11 the supplier of the boards which should have been  
12 supplied correctly.

13 Q What standard, what industry standard or  
14 governmental regulation are you relying upon for your  
15 opinion that the seller of a component part has an  
16 obligation to preset those parts before they are sold  
17 and delivered?

18 A I am relying on my experience in the  
19 industry.

20 Q No standard?

21 A There may be a standard, but that's such an  
22 obvious apparent truth that I wouldn't expect  
23 something like that to even be in a standard.

24 Q So you are not aware of a standard?

1 A No, I am not.

2 Q And you are not aware of a governmental  
3 regulation?

4 A No. None is needed.

5 Q Now did you get your hypothesis in any way,  
6 conduct a survey?

7 A I have spent dozens of years in the  
8 industry, and I know that when someone purchased a  
9 component from us, we took great pains to ensure that  
10 component was the same as originally supplied.  
11 That's true throughout the industry.

12 Q Did you test your hypothesis in any way?

13 A You mean did I take a survey of suppliers of  
14 components? I did not.

15 Q You did not. Did you talk to any electrical  
16 component suppliers?

17 A Only those that I have been involved with  
18 when I was with the industry.

19 Q You talked to them in connection with your  
20 opinion in this case?

21 A No, I did not.

22 Q It's fair to say you didn't do anything to  
23 try to test or validate your hypothesis that  
24 equipment suppliers for component parts have an

1 obligation to preset those before they are sold and  
2 delivered, right?

3 A I wouldn't call it a hypothesis. It's a  
4 self-evident truth.

5 Q Truth is in the eye of the beholder, is that  
6 fair to say?

7 A Yes, that's fair to say.

8 Q So it's your opinion, right?

9 A It's the way that I functioned when I was  
10 with industry.

11 Q And it's nothing more than that?

12 A I think that's sufficient.

13 Q Okay. You can buy electrical components at  
14 a hardware store, isn't that true?

15 A You can, yes.

16 Q You could go to Mike's Electrical Supply and  
17 by electrical components, right?

18 A Standard off-the-shelf electrical  
19 components, yes.

20 Q You can buy voltage regulators, for example?

21 A True.

22 Q And when you are in industry, if you are at  
23 the Lenox Machine Company, for example, where you  
24 worked, from time to time would the electricians or

1 location shown on the drawings."

2 Do you see that sentence?

3 A No. I am sorry. All right. Yes. I see  
4 that sentence.

5 Q Is that sentence true?

6 A Yes.

7 Q Didn't you tell me earlier there were  
8 schematics?

9 A Yes.

10 Q And the schematics showed the correct switch  
11 setting?

12 A Yes.

13 Q It would show someone how to set the switch?

14 A If they looked at the schematics.

15 Q Is that sentence saying there were no  
16 schematics showing --

17 A There were no specific instructions  
18 instructing those looking at the schematics that the  
19 switch setting was extremely important to the  
20 operation of this machine.

21 Q Wouldn't everything on the schematics be  
22 extremely important to the operation of the machine?

23 A Some items more so than others.

24 Q But everything on there is important?

1 Proma Technologies including the electrical  
2 schematics.

3 A No, I haven't seen that.

4 Q I show you No. 2 and ask you if you  
5 recognize this document as the index to the  
6 electrical schematics of Proma Technologies.

7 A I haven't seen that before either.

8 Q Let me show you Hagopian Exhibit No. 5 and  
9 ask you if you recognize that document.

10 A No, I don't recognize that document.

11 Q Have you seen that before? That's a  
12 schematic layout of the M59 drive.

13 A No.

14 Q Turn to Hagopian No. 6. I ask you if you  
15 have seen that document before.

16 A Yes, I have seen a portion of that document.

17 Q What is this document?

18 A That apparently is the schematic for the  
19 daughter board.

20 Q Does Hagopian No. 6 call the user's  
21 attention to the correct switch location?

22 A Does it call the user's attention to it? It  
23 shows a switch but doesn't call the user's attention  
24 to it.

1 Q Where does it show the switch?

2 A (Witness indicated).

3 Q See the note in the bottom left-hand corner?  
4 Could you read that out loud, please.

5 A OS13 for use with SMVE 2420. Has M55, M59  
6 in parentheses. It says, Set S-1 to Position 1 for  
7 M55, non-SMT; set S-2 to Position 2 for M59.

8 Q Do you understand S-1 to mean switch?

9 A Yes.

10 Q Did that notation in this drawing tell the  
11 user to set the switch to Position No. 1 when using  
12 the M55 drive?

13 A It does.

14 Q And to set to position No. 2 when using the  
15 M59 drive?

16 A It does.

17 Q So this schematics in fact calls out to the  
18 user's attention the correct switch location, does it  
19 not?

20 A It does.

21 Q That would mean your statement on page 8 of  
22 your report is not correct?

23 A I hadn't seen that before.

24 Q You hadn't seen the notation on the drawing?

1 A No.

2 Q Having seen that notation on Hagopian  
3 Exhibit No. 6, is it fair to say this exhibit, this  
4 schematic shows the user how to set the switch?

5 A It informs the user how to set the switch,  
6 yes.

7 Q Let's continue on page 8 and let's look at  
8 the summary of findings.

9 There is numbered Part 1, 2, 3, 4, 5.  
10 In shorthand are those the five opinions you have in  
11 this case?

12 A As I sit here today, yes.

13 Q One, Atlas, slash, Valmet -- we are talking  
14 about the U.S. company, correct?

15 A Yes.

16 Q -- was negligent in failing to inspect the  
17 switch on the drive board prior to shipping the board  
18 to Proma Technologies.

19 That's your opinion?

20 A Correct.

21 Q And am I correct that that opinion is based  
22 on your personal experience in the industries that  
23 you worked for?

24 A Yes.



1 Q Not based on an industry standard you can  
2 articulate or point to?

3 A That's correct.

4 Q Not based on a consensus standard that's  
5 been published, correct?

6 A Correct.

7 Q Not based on a government regulation,  
8 correct?

9 A None that I know about at this point.

10 Q Not based on some publication somewhere that  
11 talks about good sales practices that you can point  
12 to?

13 A Nothing I can point to right now.

14 Q Not based on a survey that you took?

15 A Correct.

16 Q Not based on a survey that you read based on  
17 your personal experience?

18 A Correct.

19 Q And you have never worked for a company that  
20 sold electrical components, correct?

21 A That is correct.

22 Q And you have never worked for a company that  
23 receives components from various vendors and then  
24 ships those components to end users?



1 those drives.

2 Q So was there an internal protocol at Lenox  
3 where you worked that opened up each package and  
4 opened up each box and checked each position of each  
5 switch and each circuit?

6 A I don't recall. If there was such a  
7 situation that arose, it was Lenox's responsibility  
8 to ensure that that component, whatever it happened  
9 to be, went out in the condition in which it was to  
10 be used, ultimately to be used.

11 Q I am asking you about the protocol used.  
12 What was used by a company that you worked for,  
13 including Lenox, to see to it that all the switches  
14 and all the circuits on all the electrical components  
15 that they resold were properly set?

16 A Well, all of these companies had an  
17 inspection department, inspected all manufactured  
18 components and also inspected purchased components.

19 Q Were you in the Lenox inspection department?

20 A I wasn't in the inspection department. I  
21 was in charge of quality control, for example, at  
22 Gifford --

23 Q Let's stick with Lenox, and we will go to  
24 Gifford Wood afterwards.

1 A All right.

2 Q At Lenox did you know that every package  
3 that came in was inspected?

4 A There was a protocol to do so.

5 Q Who created that protocol?

6 A I don't recall.

7 Q How was it published?

8 A All of these companies have quality control  
9 departments, and quality control is designed to do  
10 exactly that, make sure that products that go out are  
11 quality products and designed and set up to operate.

12 Q I am having trouble distinguishing  
13 between -- sometimes I hear you say what's an  
14 assumption; that Lenox checked components before they  
15 shipped them out. Sometimes it sounds like you are  
16 saying you know that they opened up the packages,  
17 took them out of the packages and checked every  
18 component.

19 A It's quite a few years ago. My memory is a  
20 little fuzzy. I know that's what quality control  
21 departments do in general.

22 Q You don't have a specific recollection of a  
23 protocol in place at Lenox to do that, to open the  
24 packages and check every switch and every component?

1           A     I don't recall specifically whether they did  
2     that on every single package, but I know there was a  
3     procedure in place that in ordering components that  
4     they conformed specifically to the same component  
5     that was sent out with the machine initially to  
6     obviate the necessity for doing that in every single  
7     case.

8           Q     So they had a model number and product  
9     number?

10          A     Exactly.

11          Q     And they would order it by model and product  
12     number?

13          A     Yes, and if there were any special  
14     instructions, that would also be included as part of  
15     the order.

16          Q     By ordering by model and product number,  
17     your company expected the product to arrive correctly  
18     set, right?

19          A     Yes.

20          Q     And they would pass it on to the customer  
21     with that same expectation that it was correctly set  
22     by whoever you got it from?

23          A     If it was properly ordered, it should be  
24     properly set, yes.

1 Q Now in all of the companies that you worked  
2 for, the same quality control control type procedure  
3 existed, is that your assumption?

4 A Standard throughout the industry, yes.

5 Q So when you worked for a company and the  
6 product came in, Lenox or Gifford --

7 A Gifford Wood.

8 Q -- Gifford Wood didn't take the component  
9 part out of its box and out of its bubble wrap and  
10 solder the switches into place, right?

11 A If the component were properly ordered, the  
12 switches would be in place.

13 Q All I am trying to focus on is No. 1,  
14 failing to inspect. In fact your experience was the  
15 inspection procedure was to order the right part with  
16 the right product numbers so you didn't have to do  
17 inspection, correct?

18 A That's correct.

19 Q And Opinion No. 2, you say failing to set  
20 and secure, but that obligation is avoided by  
21 ordering the part by its correct model number and  
22 serial number, correct?

23 A Apparently the part wasn't ordered  
24 correctly.

1 Q Am I correct the obligation is to order it  
2 correctly?

3 A That's the obligation, yes.

4 Q It's not to open the box and adjust the  
5 product before you send it out?

6 A Well, that certainly depends on what type of  
7 arrangement Atlas/Valmet had with their supplier. I  
8 mean if they had an arrangement where they were just  
9 to order generic boards, then, yes, it was certainly  
10 their responsibility to inspect and set and secure.

11 Q And if their operating procedure was to  
12 order a specific board by number from Infranor so  
13 that Infranor could properly set the switches and  
14 build the drive for the end user, the obligation  
15 would not be to open it, inspect it, and set it?

16 A By their own testimony they had no real  
17 procedure in place for doing or ensuring that the  
18 right board came in.

19 Q Want to answer my question?

20 A What was it?

21 MR. KELLEHER: Would you read it  
22 back.

23 (Record read)

24 A If they had some assurance that the board

1 was shipped to them with the switch in the proper  
2 location, they might not have an obligation to open  
3 each and every one, but they certainly would have an  
4 obligation to spotcheck. All companies do that.

5 Q I will go back to my questions I asked you  
6 you with regard to Paragraph 1.

7 Is there any industry standard or  
8 consensus standard that sets forth how and when a  
9 supplier needs to inspect or spotcheck products?

10 A There may be, but as I sit here today I  
11 don't know.

12 Q You are not relying upon any industry  
13 standard?

14 A No, I am not.

15 Q You are not relying upon any governmental  
16 regulation?

17 A No. I am relying on my experience.

18 Q You are not relying on any industry type  
19 publication?

20 A Well, I am sure there are many, but I am not  
21 relying on them.

22 Q And at the companies that you worked for,  
23 they had quality control procedures in place, but you  
24 don't specifically today as you sit here know what

1 they were, right?

2 A I don't. That's a long time ago.

3 Q You don't know whether the companies that  
4 you worked for in fact inspected every tenth product,  
5 every one hundredth product or every one thousandth  
6 product, right?

7 A I don't recall. They may have inspected  
8 every one.

9 Q You don't know when they inspected them  
10 whether they took the product out and compared it to  
11 the mechanical drawings, if it was a mechanical part,  
12 or compared it to electrical drawings, if it was an  
13 electrical part?

14 A I don't have a specific recollection of  
15 that, no.

16 Q It wasn't part of your job to know that at  
17 the time, was it, in which of your jobs?

18 A No, it wasn't. In a small company you are  
19 peripherally involved with all departments.

20 Q You had an understanding that you sold good  
21 products and you stood behind your products?

22 A Certainly.

23 Q You didn't develop or implement or publish a  
24 quality control procedure with regard to component

1 parts at any of the companies you worked for, right?

2 A I am sorry. Repeat the question.

3 MR. KELLEHER: Could you read it  
4 back.

5 (Record read)

6 A Me personally?

7 Q Yes.

8 A No, I did not personally.

9 Q You were not involved in it personally?

10 A I was not involved in it personally, but  
11 certainly it would depend on the component as well as  
12 to the degree of inspection necessary.

13 Q Do you have an opinion as to the condition  
14 of the drive boards and the position of the switch at  
15 the time this machine was originally sold and started  
16 up in 1993?

17 A Yes.

18 Q What's your opinion?

19 A The same position in which Mr. Purcell put  
20 the switches in.

21 Q Excuse me. Say that again.

22 A The same position in which the switches were  
23 put in after Mr. Pucillo's accident.

24 Q So it's your opinion that at the time of



1 startup in 1993 all the switches were in their proper  
2 position, is that your opinion?

3 A I don't know. I wasn't there in 1993.

4 Q Okay.

5 A Maybe I misunderstood your question.

6 Q Maybe.

7 I am asking you do you have an opinion  
8 as to whether the switches were properly set or  
9 improperly set when the machine was first installed  
10 in 1993?

11 A I don't know. All I can tell you is that  
12 during my initial meeting with Proma in 2002 I was  
13 told there had been several what they call phantom  
14 startups. They didn't know the causes of them.  
15 Whether that dates back from when the machine was  
16 installed, I don't know.

17 Q So the switch at issue in this case could  
18 have been improperly set in 1993, correct?

19 A I don't know. I have no opinion on that.

20 Q It would have been properly set in 1993?  
21 You have no opinion?

22 A Anything is possible.

23 Q You have no knowledge either way?

24 A I don't.

1 Q You have no knowledge as to when the switch  
2 on the drive board board at issue was either put into  
3 the improper position or became improperly  
4 positioned, correct?

5 A It's my opinion it was improper when it was  
6 shipped to Proma or Van Leer.

7 Q Tell me the facts upon which you have  
8 concluded that that switch was in the improper  
9 position at the time it was received by Proma.

10 A There is no reasonable cause for anybody at  
11 Van Leer or Proma to move that switch to an improper  
12 position.

13 Q Therefore it's your opinion it is improperly  
14 positioned by somebody prior to it arriving at Proma?

15 A Yes.

16 Q So you have ruled out the fact that someone  
17 installing the drive inadvertently moved the switch,  
18 correct?

19 A Well, this wasn't the only switch --

20 Q Answer my question. Have you ruled that out  
21 as a possibility?

22 A It's improbable.

23 Q Would you rule it out?

24 A Can't rule out anything at this point.

1 Q Did you rule out the fact that the switch  
2 may have been improperly positioned or caused to be  
3 improperly positioned by its means of storage at  
4 Proma Technologies?

5 A Pretty much, yes.

6 Q Did you rule out the fact that it was  
7 improperly positioned in or about 1996 at the time  
8 that Mr. Rice was discussing Proma Technologies'  
9 confusion with respect to the switch settings?

10 A That paragraph is unclear. I don't know  
11 what they are referring to, and I don't know which  
12 switch they are referring to.

13 Q You have ruled out the fact that Proma  
14 Technologies or Van Leer was confused and improperly  
15 set the switch?

16 A There is nothing in that paragraph that said  
17 they have made any switch changes or any switch  
18 settings. They are asking where the switch should be  
19 set. I don't even know if they are talking about  
20 this particular switch.

21 Q You told me it's your opinion that this  
22 switch was improperly set before it arrived at Proma.  
23 I am trying to find out if you ruled out all the  
24 possibilities of it being improperly positioned at

1 Proma.

2 A I ruled out the probabilities.

3 Q How did you rule out those probabilities?

4 A I considered what is more probable than not.

5 Q What facts did you consider to make that  
6 statistical analysis?

7 A I have considered all the information I have  
8 reviewed. I considered my experience in the  
9 industry. I have considered the fact that people  
10 don't typically adjust switches or misadjust  
11 switches. It's my opinion this switch was received  
12 in the improper position.

13 Q In your experience in industry do electrical  
14 engineers ever make a mistake in setting switches?

15 A Everyone makes mistakes.

16 Q Do licensed electricians make mistakes?

17 A Everyone makes mistakes.

18 Q Tell me how come it's not at all probable  
19 that a mistake was made at Proma Technologies.

20 A Well, it's not the only mistake. There are  
21 other mistakes that were incorrect positions. There  
22 were switches that were open. It doesn't make any  
23 sense that that would have been done at Proma  
24 Technologies.

1 Q Who installed all the drives?

2 A Who installed the drives?

3 Q Yes.

4 A Proma.

5 Q Now how many drives on this machine had the  
6 switch correctly set?

7 A I don't recall.

8 Q Is it in your report?

9 A It may be. I don't know if Atlas/Valmet may  
10 have installed some of those drives during their  
11 service calls.

12 Q Let me direct your attention to page 4.

13 A I just found it.

14 Q Paragraph above the Roman IV.

15 A Mm-hmm.

16 Q Take a look at that paragraph. Tell me how  
17 many drive boards there are on this machine.

18 A It doesn't tell you how many drive boards  
19 are in the machine.

20 Q Do you know?

21 A One for each drive. I believe there are  
22 ten drives.

23 Q So that would be ten drive boards then,  
24 correct?

1 A Yes.

2 Q And how many were not properly positioned?

3 A Four.

4 Q So six were properly positioned, correct?

5 A Correct.

6 Q How did they get properly positioned?

7 A How do they get properly positioned? Maybe  
8 they were received that way.

9 Q What's the probability?

10 A The probability that they were received that  
11 way?

12 Q What's the probability that those six  
13 switches were properly positioned prior to arriving  
14 at Proma Technologies?

15 A I would say it's pretty good.

16 Q If the same procedure was followed by the  
17 seller of the component part for the four that were  
18 improperly positioned as was used for the six that  
19 ~~were properly positioned, isn't it probable those~~  
20 four would have received by Proma Technologies  
21 correctly positioned?

22 A I don't know anything about the procedure  
23 for setting or checking switches or quality control  
24 inspections. I can't answer that question.


1 COMMONWEALTH OF MASSACHUSETTS )

2 NORFOLK, SS. )

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4  
5  
6  
7 I, DIANE L. McELWEE, Registered Merit  
8 Reporter and Notary Public in and for the  
9 Commonwealth of Massachusetts, do hereby certify  
10 that there came before me on the 27th day of  
11 January, 2006, at 9:50 AM, the person  
12 hereinbefore named, who was by me duly sworn to  
13 testify to the truth and nothing but the truth  
14 touching and concerning the matters in controversy  
15 in this cause; that there was an examination under  
16 oath and the examination was reduced to transcript  
17 form under my direction and that the deposition is  
18 a true record of the testimony given by the witness.

14 I further certify that I am neither  
15 attorney nor counsel for, nor related to or employed  
16 by any of the parties to the action in which this  
17 deposition is taken; and further that I am not a  
18 relative or employee of any attorney or counsel  
19 employed by the parties hereto or financially  
20 interested in the action.

18 In witness whereof, I have hereunto set  
19 my hand and seal this 2<sup>nd</sup> day of February, 2006.

20  
21   
22 DIANE L. McELWEE, Notary Public  
23 My commission expires:  
24

January 24, 2008